

STATE OF SOUTH DAKOTA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
Application for a Permit to Inject - Class II Underground Injection Control

Return To: PMB 2020
SD Department of Environment and Natural Resources
Ground Water Quality Program
523 East Capitol Ave. - Joe Foss Building
Pierre SD 57501
Telephone 605.773.3296
Fax 605.773.6035

RECEIVED

JUN 30 2016

Dept. of Environment &
Natural Resources
GROUND WATER QUALITY

1.0 General Information

1.1 Application Type

- New Permit to Inject
- Major Modification to Existing Permit to Inject
- Minor Modification to Existing Permit to Inject

1.2 If requesting a new permit or major modification, provide a brief description of the new activity or proposed modification (include additional attachments as needed).

Please See Attached.

- 1.3** If requesting a minor modification, select the type(s) of modification requested (ARSD 74:12:07:09)
- Correction of typographical errors and language changes that have no legal or substantive effect
 - More frequent monitoring or reporting proposed by the permittee
 - A change in ownership or operational control of the well if the secretary determines that no other change in the permit is necessary, provided a written agreement containing a specific date for transfer of responsibility for the injection well, coverage, and liability between the current and new owner or operator has been submitted to the secretary pursuant to ARSD 74:12:07:06
 - A change in quantities or types of fluids injected which are within the capacity of the injection well as permitted and, in the judgement of the secretary, would not interfere with the operation of the injection well or its ability to meet conditions described in the permit, and would not change its classification
 - A change in construction requirements approved by the secretary pursuant to this chapter if the alteration complies with the conditions of the permit to inject and this section
 - Amendment of a plugging and abandonment plan which has been updated pursuant to this article
 - Recementing, reworking, or reconditioning a well
 - Deepening, extending, or sidetracking an existing well within the permitted injection horizon

As described in ARSD 74:12:07:09, if the department determines that a minor modification request has the potential to degrade or threaten freshwater resources, it will be treated as a major modification and subject to the Notice of Recommendation procedures (ARSD 74:12:09)

1.4 Operator Information (ARSD 74:12:07:03(8))

Name:	Continental Resources, Inc
Address:	20 North Broadway Ave. Oklahoma City, OK 73102
Telephone:	405.234.9000
Email:	clr.com

1.5 Basic information about the well(s) covered by the requested permit to inject

API Number	Well Name	Legal Location	Latitude	Longitude
See Attached				

The information required below should be included as attachments to the application form. The following should be used as a checklist to ensure all necessary material is submitted. The department recommends using the same numbering system as shown in the application form; however, if a different system is used please use the location box to identify the location of the information in the application.

1.6 Affidavit of Delivery (ARSD 74:12:07:04) - Include an affidavit showing the names and addresses of the parties to whom the application has been delivered.

Included

Location: Will send out recommendation for permit to inject when received.

2.0 Specific Application Requirements

2.1 Maps (ARSD 74:12:07:03(1))

2.1.1 Vertical Wells (ARSD 74:12:07:03(1)(a))

A one-half mile fixed radius area of review plat which shows the location of the injection well or wells, existing or proposed; the location of all oil and gas wells; the location of all water wells, active and abandoned; the location of all other wells, including plugged and abandoned wells; abandoned locations; dry holes; current drilling locations; the names of operators; the surface and mineral owners; and each offset operator

Included

Location: See Attached

2.1.2 Horizontal Wells (ARSD 74:12:07:03(1)(b))

A one-half mile fixed radius area of review plat extending in all directions from the horizontal well and any sidetracks. The plat must show the location of the injection well or wells, existing or proposed; the location of all oil and gas wells; the location of all water wells, active and abandoned; the location of all other wells, including plugged and abandoned wells; abandoned locations; dry holes; current drilling locations; the names of operators; the surface and mineral owners; and each offset operator

Included

Location: See Attached

2.2 Formation or formations from which oil, gas, and water wells are producing or have produced within the area of review (ARSD 74:12:07:03(2))

Included

Location: See Attached

2.3 The name, stratigraphic and structural description, and depth of the receiving formation or formations and the overlying and underlying confining zone(s) or formation(s) (ARSD 74:12:07:03(3))

Included

Location: See Attached

2.4 The well type, construction, spud date, total depth, formation tops, record of completion or recompletion, and plugging for all oil, gas, and injection wells within the area of review, **and any additional pertinent information which the secretary determines is necessary to make an informed judgement on the issuance of a permit**, including drill stem tests and well logs for all oil and gas wells identified in the area of review (ARSD 74:12:07:03(4))

Included

Location: See Attached

2.5 Information on abandoned and active water wells within the area of review, as follows (ARSD 74:12:07:03(5))

2.5.1 Abandoned water wells:

2.5.1.1 The legal location

2.5.1.2 Well name

2.5.1.3 Method and supporting information on abandonment, if available

2.5.2 Active Water Wells

2.5.2.1 The legal location

2.5.2.2 Well name

2.5.2.3 An analysis of water quality, including information on total dissolved solids content, chlorides, sodium, sulfates, nitrates, and hydrocarbons

2.5.2.4 The construction program, including casing size and type, if available

2.5.2.5 Depth of the well, if available

2.5.2.6 A geologic / driller's log, if available

2.5.2.7 The water level and pump type, if available

Included

Location: See Attached

2.6 A description of the injection well's casing and the proposed casing program, and the proposed method for testing the casing for mechanical integrity before use as an injection well (ARSD 74:12:07:03(6))

Included

Location: See Attached

2.7 The geologic name and the depth to and interval of all freshwater resources which may be affected by injection (ARSD 74:12:07:03(7))

Included

Location: See Attached

2.8 Schematic drawings of the surface and subsurface construction details of the well with detailed drawings of the gauge connections (ARSD 74:12:07:03(9))

Included

Location: See Attached

2.9 The source and nature of the substance or substances to be injected, its viscosity, its compatibility with the receiving formation, including stability indices, and the estimated average and maximum daily amounts to be injected. If the nature of the injected fluid is produced water, a water quality analysis must be submitted and must include information on total dissolved solids content, chlorides, sodium, sulfates, nitrates, and hydrocarbons. (ARSD 74:12:07:03(10))

Included

Location: See Attached

2.10 The average and maximum estimated injection pressure (ARSD 74:12:07:03(11))

Included

Location: See Attached

2.11 A narrative description of any proposed production stimulation program, including a feasibility study, process description, and an explanation of how the data were determined, such as working calculations (ARSD 74:12:07:03(12))

Included

Location: See Attached

2.12 A list of wells identified in subdivision 74:12:07:03(1) in need of corrective action or where corrective action has been performed, and a written justification describing how the corrective action will protect freshwater resources. (ARSD 74:12:07:03(13))

Included

Location: See Attached

2.13 The injection zone characteristics including porosity, compressibility, and intrinsic permeability. Please include the reference or source of the information. (ARSD 74:12:07:03(14))

Included

Location: See Attached

2.14 The expected project life (ARSD 74:12:07:03(15))

Included

Location: See Attached

2.15 Surface owner name, address, and telephone number (ARSD 74:12:07:03(16))

Included

Location: See Attached

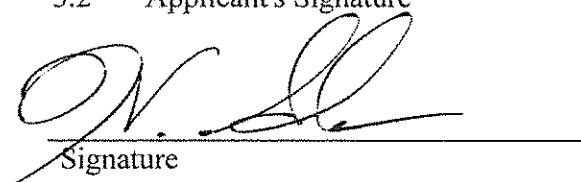
3.0 Certification of Applicant

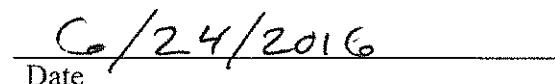
3.1 Certification of Applicant (Form 13). The applicant is required to submit a notarized Certification of Applicant (Form 13). This form can be found at <http://denr.sd.gov/documents/form13.pdf> or by contacting the Ground Water Quality Program at 605.773.3296.

Included

Location: See Attached

3.2 Applicant's Signature


Signature


Date

Nik Gardner
Printed Name of Person Signing

Associate Engineer
Title

UIC Class II Permit Application

Continental Resources is requesting to convert the following well to an injection well to enhance production from the Central Buffalo Area.

Well Name: CBRRU 24-31NH

Well Location: SESW Sec 31-T22N-R4E, Harding County, Buffalo, SD.

The application for a permit to inject shall contain the following complete information:

(1) A one-half mile fixed radius area of review plat which shows the location of the injection well or wells, existing or proposed; the location of all oil and gas wells; the location of all water wells active and abandoned; the location of all other wells, including plugged and abandoned wells; abandoned locations; dry holes; current drilling locations; the names of operators; the surface and mineral owners; and each offset operator;

See attached map.

NBRRU J-19H is operated by Luff Exploration

Brown E-29H is operated by Luff Exploration

Operator: Continental Resources is the operator of the CBRRU 24-31NH.

Working Owners:

Continental Resources Inc.

Betty Joy Njos Rev Trust Agreement

Penroc Oil Corporation

Mineral Owners

See Attached.

Surface Owner

Name: Tim and Tracey Brown

Address: 10723 Table Mountain Rd., Buffalo, SD 57720

(2) The formation or formations from which oil, gas, and water wells are producing or have produced;

Oil: Red River "B" Formation

Gas: Red River "B" Formation

Water: Red River "B" Formation, Fox Hills, Hell Creek, Inyan Kara, Madison & Minnelusa.

(3) The name, description (stratigraphic and structural), and depth of the receiving formation or formations and the overlying confining zone or formation;

Receiving formation(s): Red River "B" Formation 8,660.66 ft TVD.

The Red River "B" is a brown, fine-grained dolomitic mudstone with a thickness of 14 ft in the CBRRU 24-31NH.

Confining zone/formation(s): The CBRRU 24-31NH well enters the Red River "B" at 8660.66' TVD. The top confining zone is 40 ft of the Red River "A" at 8,608' TVD and the bottom confining zone is Red River "C" at 8,718' TVD from the Thomas B 1R.

(4) The well type, construction, spud date, total depth, formation tops, record of completion or recompletion, and plugging for all oil, gas, and injection wells within the area of review, **and any additional pertinent information which the secretary determines is necessary to make an informed judgment on the issuance of a permit**, including drill stem tests and well logs for all oil and gas wells identified in the area of review;

- 1) See Attached for Map
- 2) The Brown E-29H is operated by Luff Exploration
- 3) The NBRRU J-19H is operated by Luff Exploration
- 4) CBRRU 14-31NH
- 5) CBRRU 34-31NH
- 6) Clarkson Federal 14-28
- 7) Quinn 44-36H
- 8) Thomas B 1R
- 9) Thune A-1
- 10) Thune B 1-30

(5) Information on abandoned and active water wells, as follows:

(a) Abandoned water wells: None

- (i) The legal location;
- (ii) Well name; and
- (iii) Method of abandonment, if available;

(b) Active water wells: There is one active water well within a $\frac{1}{2}$ mile radius of CBRRU 24-31NH. Tim Brown is the owner of the water well.

- (i) The legal location; 45.827309, -103.675718. Located in the middle of T22N R4E S31
- (ii) Well name: NA
- (iii) NA
- (iv) The construction program, including casing size and type, if available; See Attached. Casing Size and Type: 2 lb/ft 5" plastic pipe to 240'.

The well is owned by Tim Brown. The well was drilled and completed September 2003 to a depth of 240'.

(6) A description of the injection well's casing and the proposed casing program, and the proposed method for testing the casing for mechanical integrity before use as an injection well.

See attached.

1) Proposed wellbore diagram

The current production equipment will be removed and a Graco Arrowset packer installed with coated tubing. Packer to be set at approx. 8,977 ft. The casing will be MIT tested as required by the State of South Dakota, which is a 15 minute test at 1000 psi with an allowable 10% fall off.

(7) The geologic name and the depth to and interval of all freshwater resources which may be affected by injection;

Name: Fox Hills Depth: 800'

(8) The names and addresses of the operators of the project;

Name: Continental Resources
Address: PO Box 268870, Oklahoma City, OK, 73126

(9) Schematic drawings of the surface and subsurface construction details of the well with detailed drawings of the gauge connections;

See Attached

(10) The source and nature of the substance or substances to be injected, its viscosity, its compatibility with the receiving formation, including stability indices, and the estimated average and maximum daily amounts to be injected. If the nature of the injected fluid is produced water, a water quality analysis must be submitted and must include information on total dissolved solids content, chlorides, sodium, sulfates, nitrates, and hydrocarbons;

See attach water analysis from Jacam Laboratories. The water for injection will all be from the Red River Formation from the Central Buffalo Red River Unit wells, Buffalo Red River Unit wells, and Table Mountain #1-7F well. The attached water analysis data sheets are for CBRRU wells, BRRU wells, and the Table Mountain well. The analysis also includes various combinations of water from the above sources to test for compatibility and scaling tendencies. Jacam states that there is a potential to precipitate iron carbonate and iron sulfide, although this issue can be eliminated by treating with 50 ppm WWT 1900 chemical.

(11) The average and maximum estimated injection pressure and volumes;

Average: 800 BWPD & 1500 psi.

Maximum: 3,000 BWPD & 1700 psi.

(12) A narrative description of any proposed production stimulation program, including a feasibility study, process description, and an explanation of how the data were determined, such as working calculations;

Feasibility Study: The feasibility of enhancing oil recovery through water injection has been demonstrated by the increase in production in the Central Buffalo Red River Units.

Process description: Water will be injected at pressure into the Red River "B" porosity zone. The water will displace the hydrocarbons from the pore spaces, sweeping the hydrocarbons towards the producing wells.

How data was Determined: Increase in oil production since the water flood project started.

(13) An analysis of any corrective action on all wells identified on the plat required by subdivision (1) of this section and the basis for the conclusion;

Corrective Action:

There are no wells within the area of review that are improperly constructed so no corrective action is need.

Basis for the Conclusion:

There are no wells within the area of review are properly constructed so no corrective action is need.

(14) The injection zone characteristics, including porosity, compressibility, and intrinsic permeability. This information has been collected over the numerous years of drilling and completion of wells within the unit using well logs.

Porosity: 20%

Compressibility: $0.7 * 10^{-6}$ psi

Intrinsic Permeability: 10 mD

(15) The expected project life

Years: 25

(16) The surface owner's name, address, and telephone number.

Name: Tim and Tracey Brown

Address: 10723 Table Mountain Rd., Buffalo, SD 57720

Telephone number: (605) 375-3349

As indicated in Section 4, the Secretary reserves the right to request additional pertinent information needed to make a recommendation on the approvability of the application. The secretary shall deny any permit application which is incomplete.

In addition, the applicant will need to submit a notorized Certification of Applicant (Form 13), that can be obtained at <http://denr.sd.gov/documents/form13.pdf>. or by contacting the South Dakota Department of Environment and Natural Resources

All permits to inject are issued pursuant to the provisions of chapter 74:10:11.01.

Name of person legally responsible for Class II operation (owner/operator),

Continental Resources INC

Address: PO Box 268870, Oklahoma City, OK, 73126

Telephone: (405) 234-9000

Local representative or contact person if different from above:

Name: Gordon Carlson

Address: 11583 S. Cave Hills Road, Buffalo, SD, 57720

Telephone: (605) 375-3731

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine or imprisonment.


Signature

6/24/2016
Date

Nik Gardner Associate Engineer
Printed Name of Person Signing Title

Subscribed and sworn before me this _____ day of _____, 20____.

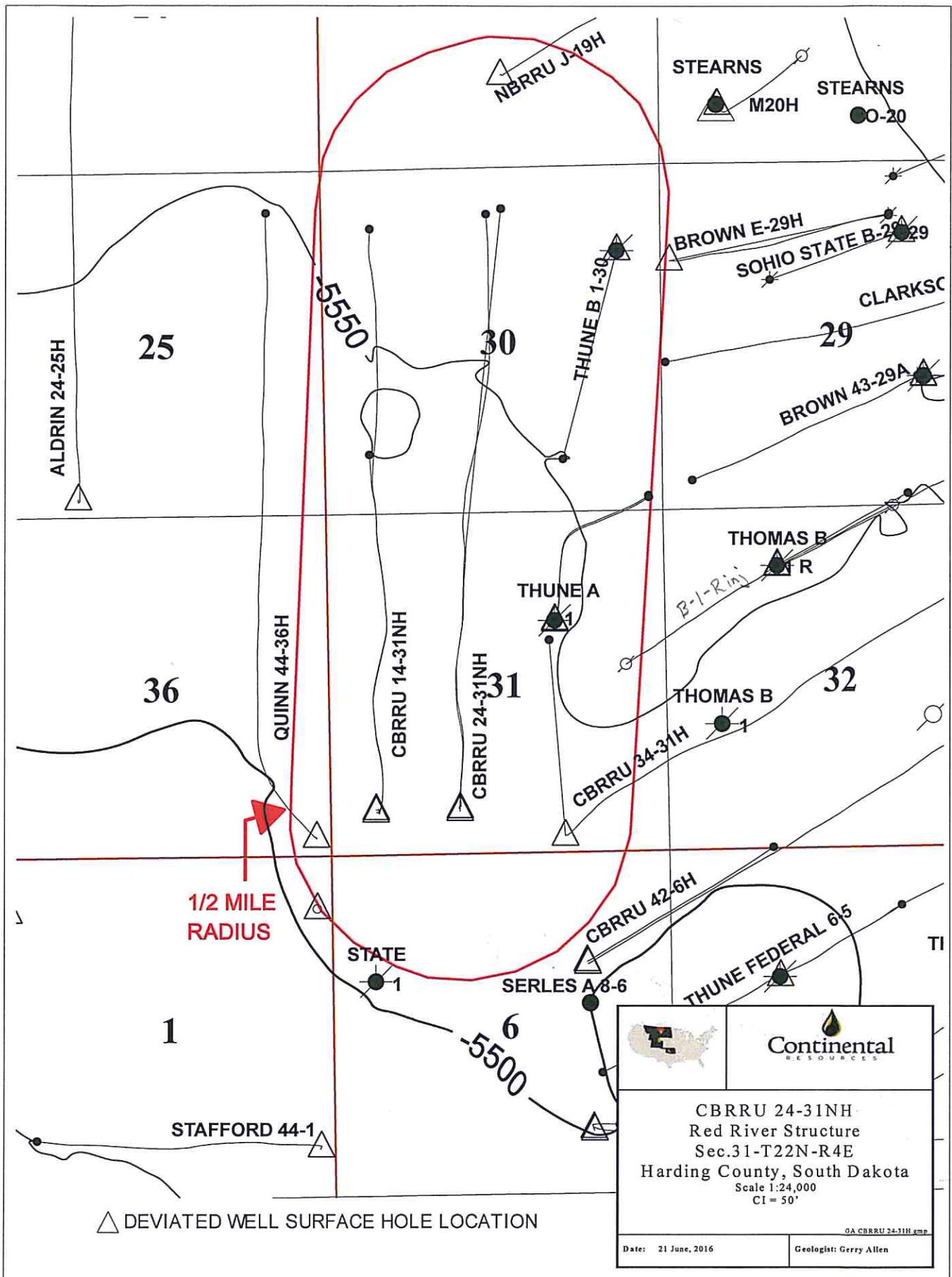
Notary Public

My commission expires: _____
(SEAL)

(1) A one-half mile fixed radius area of review plat which shows the location of the injection well or wells, existing or proposed; the location of all oil and gas wells; the location of all water wells active and abandoned; the location of all other wells, including plugged and abandoned wells; abandoned locations; dry holes; current drilling locations; the names of operators; the surface and mineral owners; and each offset operator;

See attached map.

NBRRU J-19H is operated by Luff Exploration
Brown E-29H is operated by Luff Exploration





(6) A description of the injection well's casing and the proposed casing program, and the proposed method for testing the casing for mechanical integrity before use as an injection well.

See attached.

1) Proposed wellbore diagram

The current production equipment will be removed and a Graco Arrowset packer installed with coated tubing. Packer to be set at approx. 8,977 ft. The casing will be MIT tested as required by the State of South Dakota, which is a 15 minute test at 1000 psi with an allowable 10% fall off.

CBRRU 24-31NH

Section 31, 22N, 4E 660' FSL, 2000' FWL
 GL: 3,078' KB: 3,095'
 Harding Co., South Dakota

Drilled & Completed: November 2011

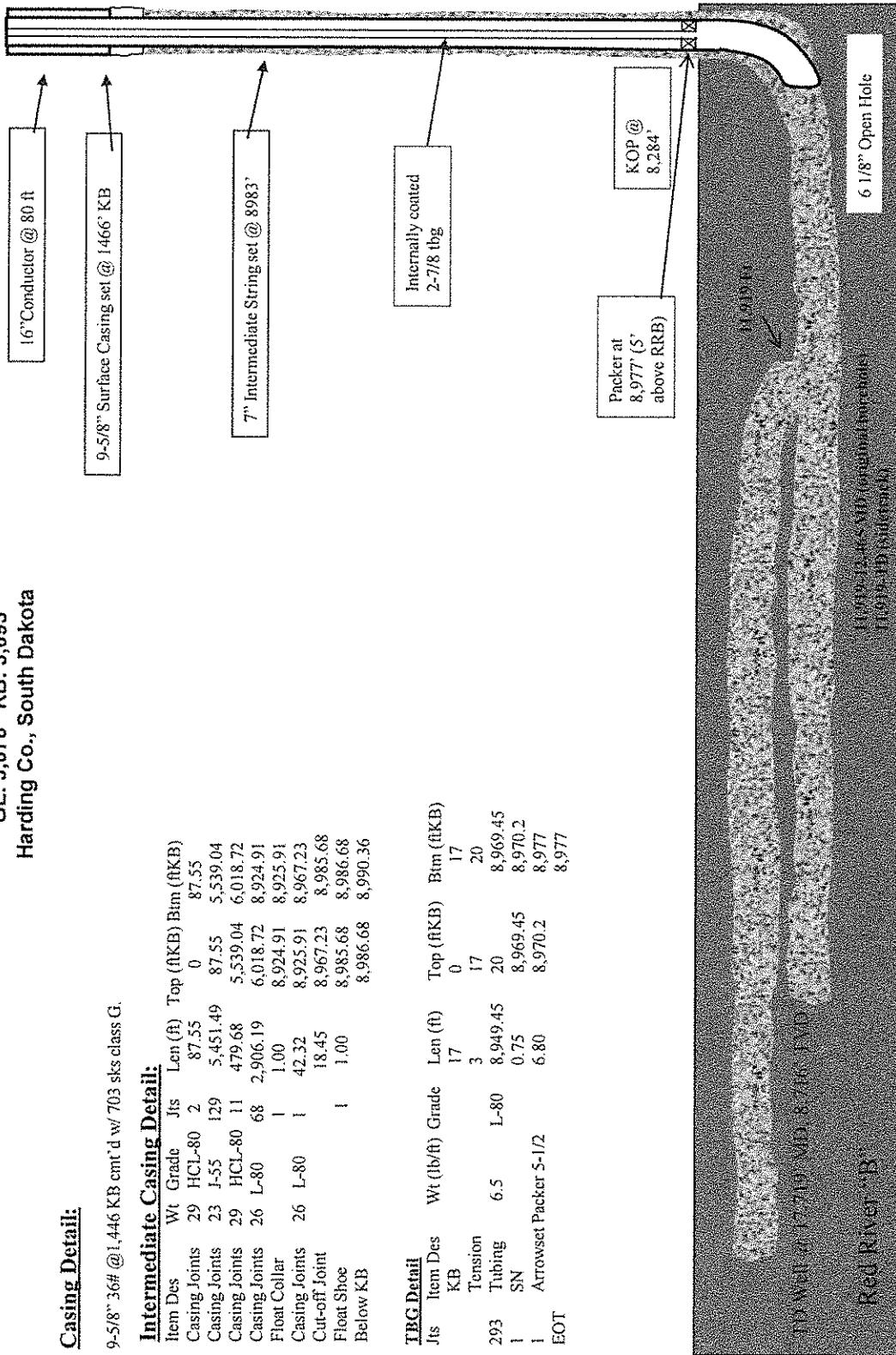
Casing Detail:

9-5/8" 26# @ 1,446 KB cm'd w/ 703 sks class G.

Intermediate Casing Detail:

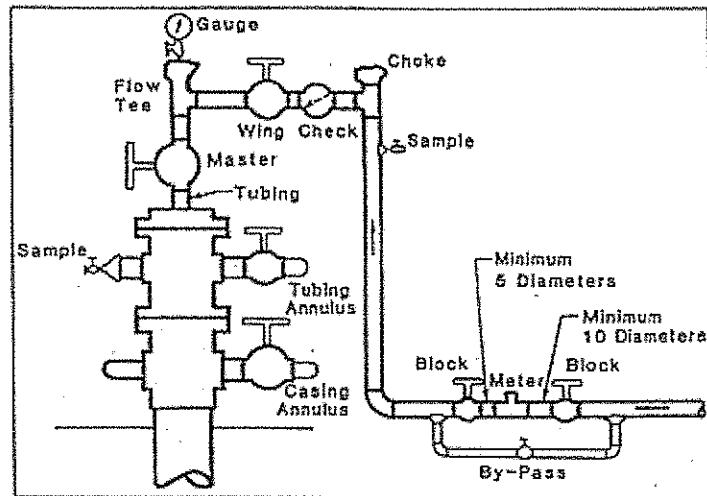
Item Des	Wt	Grade	Jts	Len (ft)	Top (ftKB)	Btm (ftKB)
Casing Joints	29	HCL-80	2	87.55	0	87.55
Casing Joints	23	I-55	129	5,451.49	87.55	5,539.04
Casing Joints	29	HCL-80	11	479.68	5,539.04	6,018.72
Casing Joints	26	L-80	68	2,906.19	6,018.72	8,924.91
Float Collar			1	1.00	8,924.91	8,925.91
Casing Joints	26	L-80	1	42.32	8,925.91	8,967.23
Cut-off Joint				18.45	8,967.23	8,985.68
Float Shoe			1	1.00	8,985.68	8,986.68
Below KB					8,986.68	8,990.36

TBG Detail	Jts	Item Des	Wt (lb/ft)	Grade	Len (ft)	Top (ftKB)	Btm (ftKB)
		KB				0	17
		Tension			3	17	20
293	1	Tubing	6.5	L-80	8,949.45	20	8,969.45
	1	SN			0.75	8,969.45	8,970.2
	1	Arrowset Packer S-1/2			6.80	8,970.2	8,977
EOT						8,977	





Oil and Gas Search for API Number 40-66190712		Detailed Data	
		Page	Prev
Export Well Data		Export Formation Logs	
Record Data		Well Information	
Print File		[No Geophysical Logs]	
Record Data		Well Information	
API No:		County:	
40-66190712		Harrison	
Well Name:		SESW Sec 31 Top 022N Ring 14E	
Permit ID:		1976	
Operator Name:		Continental Resources Inc.	
Permit Date:		(6-28-2013)	
Spud Date:		15-10-2013	
Plug Date:		45-32197	
Latitude (DD):		40.67875	
Wall Field:		Buffalo	
Print File		[No Geophysical Logs]	
Formation Logs		Elevation	
Formation	Depth (ft.)	Geological Age	
Greenhorn Limestone	3446	Cretaceous	3865
Newcastle Sandstone	4477	Cretaceous	3393
Minnekahda Limestone	5936	Pennsylvanian	3298
Charles Formation	6704	Mississippian	3626
Lodgepole Limestone	7481	Mississippian	4403
Interstate Dolomite	8155	Shiawassee	5067
Guntan, Story Mountain Formation	8516	Ordovician	5432
Story Mountain Formation	8543	Ordovician	5465
Red River Formation	8616	Ordovician	5538
Unit A, Red River Formation	8628	Ordovician	5550
Unit B, Red River Formation	8983	Ordovician	5805
Print File		[No Geophysical Logs]	



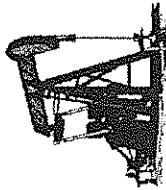
Details of water injection wellhead.

(4) The well type, construction, spud date, total depth, formation tops, record of completion or recompletion, and plugging for all oil, gas, and injection wells within the area of review, and any additional pertinent information which the secretary determines is necessary to make an informed judgment on the issuance of a permit, including drill stem tests and well logs for all oil and gas wells identified in the area of review;

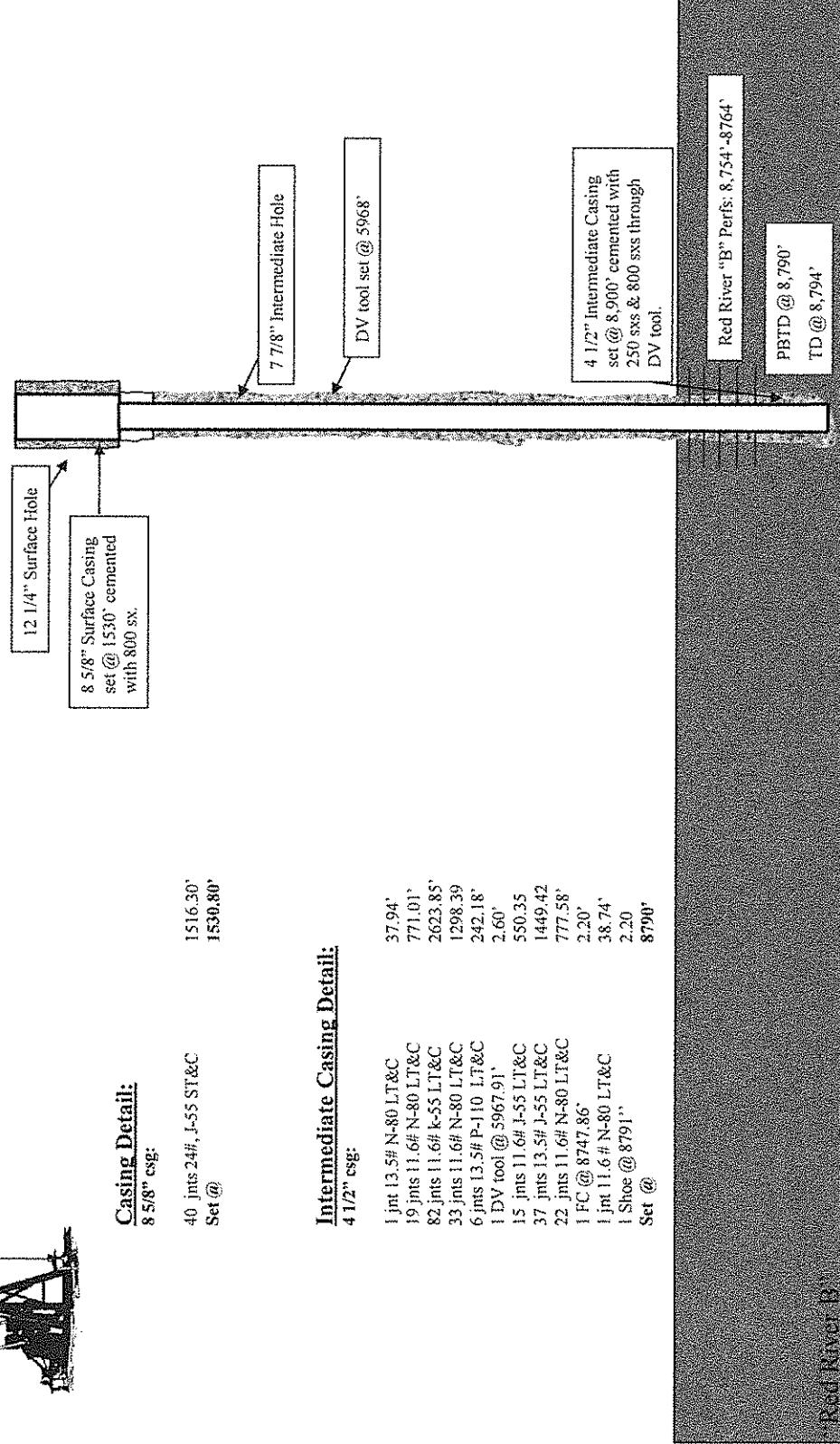
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- 3) The NBRRU J-19H is operated by Luff Exploration
- 4) CBRRU 14-31NH
- 5) CBRRU 34-31NH
- 6) Clarkson Federal 14-28
- 7) Quinn 44-36H
- 8) Thomas B 1R
- 9) Thune A-1
- 10) Thune B 1-30

Clarkson Federal 14-28

Section 28 T022N R04E
API # 40-063-26379
Harding County, Buffalo, South Dakota



Spud: 7-9-83
Completion: 8-16-83



S. P. Price

Department of Environment
& Natural Resources
REGISTRY

Oil & Gas Permits Database

New Search

Page 1 of 1

Oil and Gas Search for API Number: 40-000-2070

EnviroWell Info Sheet

Eco-Formation Test to Well

Derived Database

Page: 1 of 1 | Last

Record 1 of 1

Well Information

API No.: 40-003-2070
Well Name: 14-38 Carlson Field
Permit ID: 1277
Operator Name: Environmental Resources, Inc.
Permit Date: 06-29-1993
Spud Date: 07-03-1993
Plug Date:
Latitude [DD]: 45.80796
Longitude [DD]: -93.36733
Well Field: Buffalo
County: Hennepin
Location: SW 1/4 Sec 23 Twp 62 1/2 Rng 14 E
Total Depth: 8515
Bottom Hole: Rec River Formation
RB Elevation: 3135
Ground Elevation:
Admin Status:
Sh. In:
Well Type: C

[View Geophysical Logs](#) [No Core Pictures Available](#)

Print for Data

Print File

Log for Geophysical Log

No Injected Data

Geological Log

Formation	Depth (ft)	Geological Age
Charles Formation	6636	Mississippian
Ledgepole Limestone	7064	Mississippian
Three Forks Shale	7700	Devonian
Dipperow Formation	7950	Devonian
Intertie Dolomite	8160	Silurian
Stony Mountain Formation	8395	Ordovician
Red River Formation	2657	Ortridgian

Formation
Depth (ft)
Geological Age

6636

Mississippian

4334

Mississippian

4510

Devonian

4830

Devonian

5930

Silurian

5285

Ordovician

5437

Print

First

Last

Page 1 of 1 Geologic

**WELL COMPLETION OR RECOMPLETION
REPORT AND LOG**

TYPE OF COMPLETION

Oil Well Gas Well -----
 New Well Work-Over Deepen Plug Back Same Zone Diff Zone

OPERATOR:
Koch Exploration Company

ADDRESS:
P O Box 2256 Wichita, KS 67201

LOCATION (in feet from nearest lines of section or legal subdivision where possible)*

Surface 1200' FSL & 660' FWL

Top prod. interval

At total depth

FARM OR LEASE NAME

Clarkson-Federal

WELL NO.

14-28

FIELD AND POOL OR BLOCK

Buffalo Field

NO. ACRES IN LEASE

320

% % SEC. TWP. RGE

SWSW Sec. 22-22N-4E

COUNTY

Harding

PERMIT NO.	DATE ISSUED	PREVIOUS PERMIT NO.		DATE ISSUED
1277	6-20-83	---		---
DATE SPUNDED	DATE T.D. REACHED	DATE COMPL. (Ready to Prod.)	ELEVATIONS (OF, RR, RT, OR, etc.)*	ELEV. CASINGHEAD FLGEE
7-8-83	7-25-83	8-11-83	GL 3130' KB 3143'	---
TOTAL DEPTH (MD & TVD)	PLUG BACK T.D. (MD & TVD) PBD 8790'	IP MULTIPLE COMPL. HOW MANY* ---	INTERVALS DRILLED BY	ROTARY TOOLS CABLE TOOLS
TD 8794'				XXX
PRODUCING INTERVAL(S), THIS COMPLETION, TOP, BOTTOM, NAME (MD & TVD)*				DATE DIRECTIONAL SURVEY SUBMITTED
8754-8764' Red River "B" zone				-----

TYPE ELECTRIC AND OTHER LOGS RUN (Circle those filed)	WAS WELL CORED
GR/N thru casing	No

CASING RECORD (Report all strings set in well)					
CASING SIZE	DEPTH SET (MD)	HOLE SIZE	WEIGHT LBS./FT.	PURPOSE	SACKS CEMENT
8-5/8"	1531'	12-1/4"	24	Srfc Csg	800
4-1/2"	8791'	7-7/8"	11.6 & 13.5	Prod Csg	1150
			1 DV @ 5968' w/800 sx		

LINER RECORD				TUBING RECORD	
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SIZE	DEPTH SET (MD)
None				2-3/8	8737

PERFORATION RECORD				ACID, SHOT, FRAC., CEMENT SQUEEZE, ETC.	
DEPTH INTERVAL (MD)	HOLES PER FT.	SIZE AND TYPE	PURPOSE	AMOUNT AND KIND OF MATERIAL USED	DEPTH INTERVAL (MD)
8754-8764'	2 HPF	0.38" Jet	Prod	1 2000 gal 15% Retarded Acid	
				3000 gal 15% Retarded Acid	

PRODUCTION					
DATE FIRST PRODUCTION	PRODUCING METHOD (Flowing, gas lift, pumping,--size & type of pump)			WELL STATUS (Prod. or shut-in)	
8-4-83	Pumping, 1-1/4" Rod Pump			Producing	
DATE OF TEST	HOURS TESTED	CHOKING SIZE	PRODUCTION FOR TEST	OIL, BBL	(GAS, Mcf.)
8-19-83	24	--	→ 25	TSTM	79 bbl 76%
FLOW, TUBING PRESSURE	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL, BBL	GAS, Mcf.	WATER, BBL & % GAS-OIL RATIO
--	--	→ 25	TSTM	79 bbl 76%	--

DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY
Used for fuel Jerry Comes

LIST OF ATTACHMENTS

I hereby certify that the foregoing and attached information is complete and correct as determined from all available records
SIGNED *Doris J. Schmidt* TITLE VP Prod/Oper DATE Aug. 25, 1983

O.L.Schmidt
AUG 29 1983
Approved Date

DO NOT WRITE BELOW THIS LINE

RECEIVED SEP 8 1983
OIL AND GAS BOARD OF THE STATE OF SOUTH DAKOTA
ORIGINAL SIGNED BY FRED V. STEECE Secretary

CBRRU 14-31H
Section 31, 22N, 4E 660' FSL, 700' FWL
GL: 3,099 KB: 3,116
Harding Co., South Dakota

Drilled & Completed: June 2013

Casing Detail:

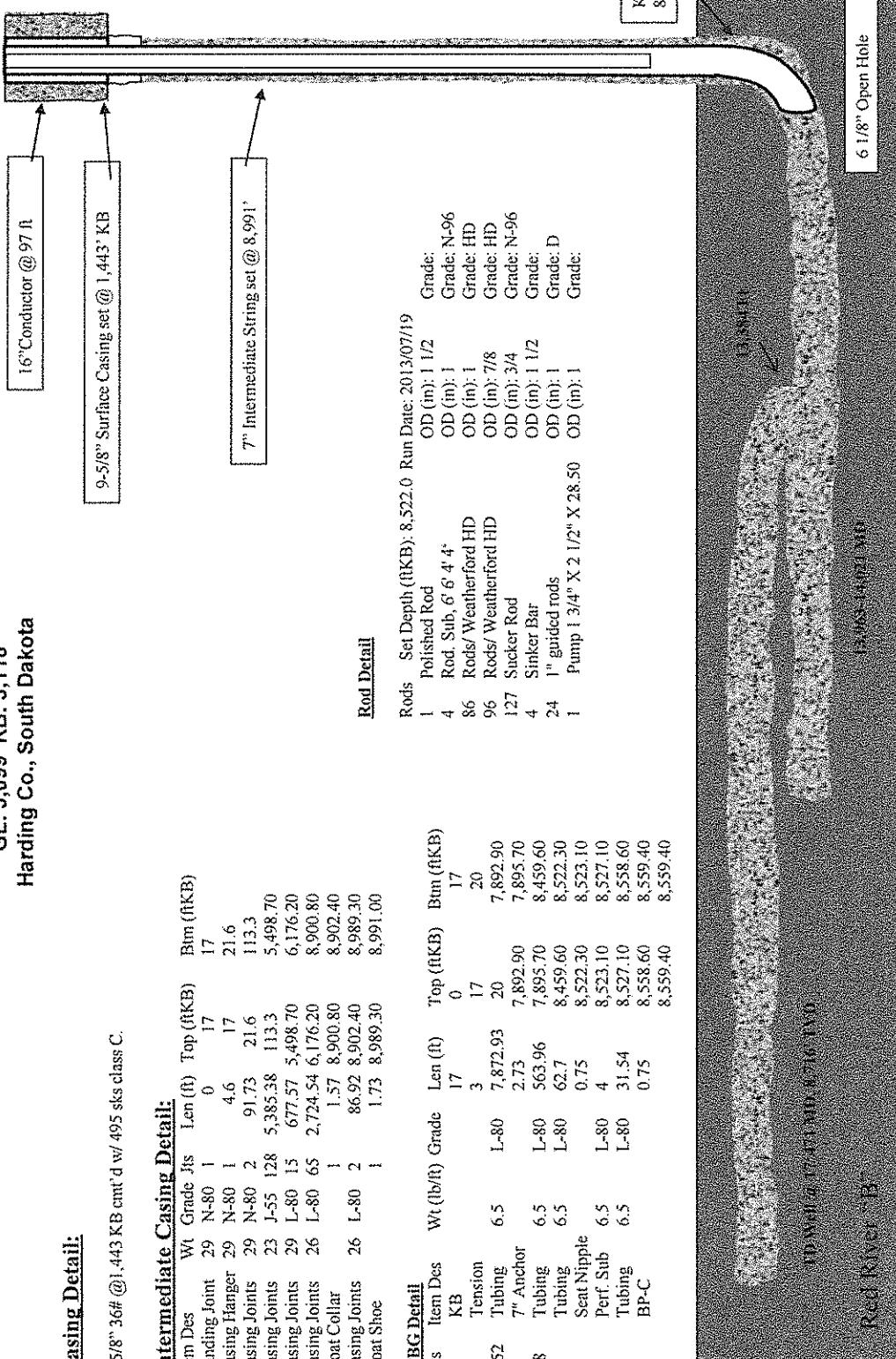
9-5/8" 36# @ 1,443 KB cmt'd w/ 495 sks class C.

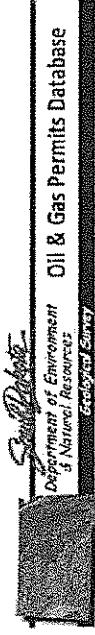
Intermediate Casing Detail:

Item Des	Wt	Grade	Jts	Len (ft)	Top (ftKB)	Btm (ftKB)
Landing Joint	29	N-80	1	0	17	17
Casing Flanger	29	N-80	1	4.6	17	21.6
Casing Joints	29	N-80	2	91.73	21.6	113.3
Casing Joints	23	J-55	128	5,385.38	113.3	5,498.70
Casing Joints	29	L-80	15	677.57	5,498.70	6,176.20
Casing Joints	26	L-80	65	2,724.54	6,176.20	8,900.80
Float Collar			1	1.57	8,900.80	8,902.40
Casing Joints	26	L-80	2	86.92	8,902.40	8,989.30
Float Shoe			1	1.73	8,989.30	8,991.90

Rod Detail

TBG Detail	Jts	Item Des	Wt (lb/l)	Grade	Len (ft)	Top (ftKB)	Btm (ftKB)	Run Date: 2013/07/19
		KB			17	0	17	OD (in): 1 1/2 Grade: N-96
		Tension			3	17	20	4 Rod, Sub, 6' 6" 4" OD (in): 1 Grade: HD
252	1	Tubing	6.5	L-80	7,872.93	20	7,892.90	86 Rods/Weatherford HD OD (in): 1 Grade: HD
	1	7" Anchor			2.73	7,892.90	7,895.70	96 Rods/Weatherford HD OD (in): 7/8 Grade: HD
18	18	Tubing	6.5	L-80	563.96	7,895.70	8,459.60	127 Snacker Rod OD (in): 3/4 Grade: N-96
	2	Tubing	6.5	L-80	62.7	8,459.60	8,522.30	4 Sinker Bar OD (in): 1 1/2 Grade: D
	1	Seat Nipple			0.75	8,522.30	8,523.10	24 1" guided rods OD (in): 1 Grade: D
1	1	Perf. Sub	6.5	L-80	4	8,523.10	8,527.10	Pump 1 3/4" X 2 1/2" X 28.50 OD (in): 1 Grade: D
1	1	Tubing	6.5	L-80	31.54	8,527.10	8,558.60	
1	1	BP-C			0.75	8,558.60	8,559.40	
						8,559.40		





Record #0		Well Information		Formation Logs	
API No:	40-663-20741	County:	Huntington	Formation:	SYSNW Sec. 31 Top C22N Proj. ME
Well Name:	CORAL 1443TH-	Total Depth:	2024	Bottom Hole:	2024
Permit ID:	2024	KB Elevation:		Ground Elevation:	3117
Operator Name:	Confidential Passures Int.	Ground Elevation:	3059	Admin Status:	Producing
Permit Date:	01-25-2013	Latitude (DD):	45.821958	Longitude (DD):	-91.633700
Spud Date:	02-06-2013	Well Type:	Drill		
Plug Date:					
Latitude (DD):					
Longitude (DD):					
Well Field:	Buffalo				
Pennant:	F6				
Production Data:					
Vent Geophysical Log:					
Key for Geophysical Log:	Y112				
Formation	Depth (ft.)	Ecological Age	Elevation		
Greasemon Limestone	3460	Cretaceous	.3551		
Dakota Sandstone	4188	Cretaceous	.3388		
Pine Silt, Spearfish Formation	5700	Permian	.2601		
Milankuhita Limestone	6318	Permian	.2919		
Charles Formation	6722	Mississippian	.3622		
Lodgepole Limestone	7456	Mississippian	.4337		
Red River Formation	8327	Cretaceous	.5525		

Page 1 of 1 Previous

Page 1 of 1 Next



DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES
Minerals & Mining Program
2050 West Main, Suite #1, Rapid City, SD 57702-2493
Telephone: 605-773-4201, FAX: 605-394-5317

RECORDED

JUL 26 2013

DEPT OF ENVIRONMENT & NATURAL
RESOURCES - RAPID CITY

WELL COMPLETION OR RECOMPLETION REPORT

Type of Completion: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Injection <input type="checkbox"/> Workover <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Other: _____				
Name and Address of Operator: _____ Telephone: _____ Continental Resources, Inc., P.O. Box 268870, Oklahoma City, OK 73126 405-234-9000				
Name and Address of Drilling Contractor and Rig No: Cyclone Drilling, Inc., #1, P.O. Box 908, Gillette, WY 82717-0908				
Surface Location of well: Qtr-Qtr, Sec, Twp, Rge, County, feet from nearest lines of section, and latitude and longitude (if available) SWSW Sec 31 (Lot 4), T22N RSE, Harding Co., 660' FSL & 700' FWL, Lat: 45 49 19.09; Long: -103 41 01.96				
If Directional, top of pay and bottom hole location from nearest lines of section: Top of Pay: 9053' MD; 1262' FSL & 806' FWL Sec 31; BHL: NWNW Sec 30 T22N RME, 896' FNL & 723' FWL				
Well Name and No.		Field and Pool, or Wildcat	Permit No.	API No.
CBRRU 14-31NH		Central Buffalo; Red River "B"	2024	4D-063-20741
Spud Date	ID Date	Compl Date	Elevation	Total Depth (MD & TVD)
2/8/2013	3/4/2013	6/13/2013	3099	MD: 17,471' TVD: 8716'
Producing Interval(s), this Completion, Top, Bottom, Name (MD & TVD)				
Producing Interval: Red River "B" from 8991' - 17,471'				
No. of DST's run (see page 2)				
Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes List Intervals:				
Type Electric and Other Logs Run				
Date Directional Survey Submitted				
CBL/GR				

CASING RECORD (Report all strings set in well)

Hole Size	Casing Size	Weight (lb/ft)	Depth Set	Amount Pulled	Sacks and Type of Cement	Top of Cement
20"	16"	75#	97'			Surface
13 1/2"	9 5/8"	36#	1443		495 sacks Class C, Type III	Surface
8 3/4"	7	23, 26, 29#	8991'		855 sacks Class C, Therm 35	

TUBING RECORD

Size	Weight (lb/ft)	Depth Set	Packer Type & Depth	Size	Depth Interval	Sacks and Type of Cement
2 7/8"	6.5#	8576'				

LINER RECORD

Size	Weight (lb/ft)	Depth Set	Packer Type & Depth	Size	Depth Interval	Sacks and Type of Cement
2 7/8"	6.5#	8576'				

PERFORATION RECORD

Interval/Depth	Holes Per Ft.	Formation Isolated	Amount and Type of Cement used (indicate if squeeze cemented). Amount and Type of Acid and/or Sand used. Use additional page(s) if needed.
OWB 8991' - 14,021'	Open Hole		
ST1 13,375' - 17,471'	Open Hole		

Continued on Next Page →

PRODUCTION

Date First Production 6/14/2013	Producing Method (Flowing, gas lift, pumping - size and type of pump) Rod Pump 1 1/2" X 2 1/2" X 28 1/2"					Well Status (producing or shut-in) Producing	
Date of Test 6/15/2013	Hours Tested 24	Choke Size NA	Production For Test → 32	Oil (Bbls) 0	Gas (Mcf) 0	Water (Bbls & %) 338	Oil Gravity - API (Corr.) 28.7
Flowing Tbg Pressure 0	Casing Pressure 0	Calculate →	Oil (Bbls) 32	Gas (Mcf) 0	Water (Bbls & %) 338	Gas-Oil Ratio 0	
Disposition of Oil (Purchaser and Transporter), and Gas (sold, used for fuel, vented, etc.) Plains Pipeline - Transporter; No measurable gas					Test Witnessed By Gordy Carlson		
List of Attachments/Comments CBL/Geological Report/Directional Surveys							

GEOLOGIC MARKERS

FORMATION NAME AND BRIEF DESCRIPTION	MEASURED DEPTH	TRUE VERTICAL DEPTH
Greenhorn		3460
Dakota Sand		4488
Pine Salt		5700
Minnekahta		6018
Kibbey Lime		6624
Charles		6722
Green Point Anhydrite		6865
Lodgepole		7496
Red River	8783	8627

Use additional page(s) if needed.

DRILL STEM TEST DATA

Drill Stem Test Results Attached
If not attached, list Depth Interval Tested, Cushion Used, Time Tool Open, Flowing and Shut-in Pressures, and Recoveries.

Use additional page(s) if needed.

I hereby certify that the information herein provided is true, complete, and correct as determined from all available records.

	Terry L. Olson	Name (Print)	Reg. Compliance Specialist	7/22/2013
Signature		Title	Date	

CBRRU 34-31H

Section 31, 22N, 4E 210' FSL, 1600' FEI.
 GL: 3,061' KB: 3,078'
 Harding Co., South Dakota

Drilled & Completed: October 2005

Casing Detail:

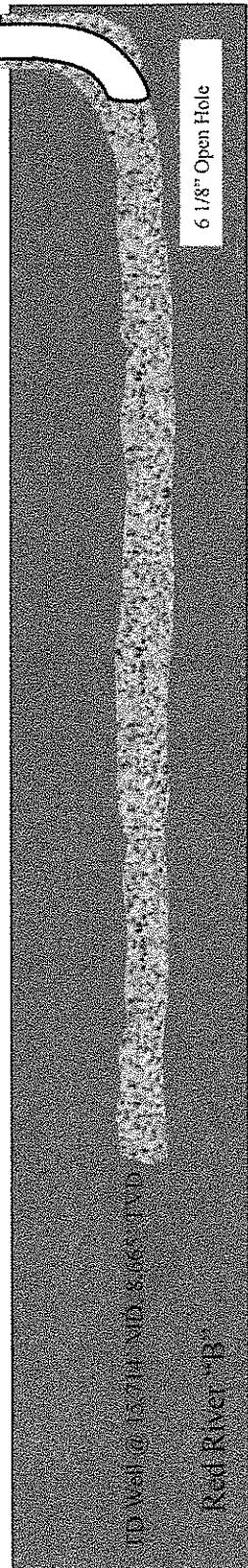
9-5/8" 36# @1,446 KB cmt'd w/ 660 sks class G.

Intermediate Casing Detail:

Item Des	Wt	Grade	Jts	Len (ft)	Top (ftKB)	Btm (ftKB)	Bottom (ftKB)
Casing Joints	29	P-110	1	43.89	0	43.89	
Casing Joints	23	J-55	129	5,456.07	43.89	5,499.96	
Casing Joints	29	P-110	11	483.87	5,499.96	5,983.83	
Casing Joints	23	L-80	26	1,100.38	5,983.83	7,084.21	
Casing Joints	26	L-80	40	1,754.58	7,084.21	8,838.79	
Float Collar			1	2.00	8,838.79	8,840.79	
Casing Joints	26	L-80	1	43.68	8,840.79	8,884.47	
Float Shoe			1	1.00	8,884.47	8,885.47	
					8,877.00		

Rod Detail:

TBG Detail	Jts	Item Des	Wt (lb/ft)	Grade	Len (ft)	Top (ftKB)	Btm (ftKB)	Rods	Set Depth (ftKB)	Run Date:	Grade:
		KB			13	0	13	1	Polished Rod	8,579.0	2013/04/12
		Tension	6.5		3	13	16	4	Rod, Sub 2' 4" 6' 8"		OD (in): 1 1/2 OD (in): 1
264	1	Tubing	6.5	L-80	8,157.78	16	8,173.78	76	Rods/ Weatherford HD		Grade: non-API
		7" Anchor			2.73	8,173.78	8,176.51	103	Rods/ Weatherford HD		Grade: non-API
	13	Tubing	6.5	L-80	401.70	8,176.78	8,578.21	130	Sucker Rod		Grade: non-API
	1	Seat Nipple			0.75	8,578.21	8,578.96	10	Sinker Bar		Grade: D
	1	Perf. Sub	6.5	L-80	4	8,578.96	8,582.96	20	1" guided rods		OD (in): 1
	1	Tubing	9.3	L-80	34.25	8,582.96	8,617.21	1	Pump 2 1/2" X 2" X 30'		OD (in): 1
	1	BP-C			0.75	8,617.21	8,617.96		KOP @		
						8,617.96	8,617.96		8,180'		



1D Well @ 1750' min 800' max

Red River



Search Results for API Number 4103700

Download Database
Page: 1 of 1 Next

New Search
Page 1 of 1

Record #1	
Well Information	

API No: 4103700
Well Name: CBRRU343H
Permit ID: 1761
Operator Name: Confidential Resources Inc.
Permit Date: 05-25-2005
Spud Date: 05-25-2005
Plug Date:
Latitude (DD): 41.620718
Longitude (DD): -93.672317
Well Field: Bafford
County: Hardin
Location: SWSE sec 31 Twp 22N Rng 9E
Total Depth: 0
Bottom Hole: Red River Formation
KB Elevation: 3275
Ground Elevation: 3281
Admin Status: Pending
Longfdate (DD): 03-672317
Well Type: C1

[View Geophysical Logs]

[View Log Type]

[No Geophysical Logs]

[No Log Type]

Formation	Depth (ft.)	Geological Age	Elevation
Greenhorn Limestone	4572	Cretaceous	4541
Piper Formation	550	Tertiary	2579
Pine Salt, Spanish Fish Formation	5824	Permian	3763
Kibbey Formation	5633	Mississippian	3627
Ledgestone Limestone	5040	Mississippian	4679
Unit A, Red River Formation	5309	Cretaceous	5735
Unit B, Red River Formation	5329	Cretaceous	5506

Formation Log			
Formation	Depth (ft.)	Geological Age	Elevation
Greenhorn Limestone	4572	Cretaceous	4541
Piper Formation	550	Tertiary	2579
Pine Salt, Spanish Fish Formation	5824	Permian	3763
Kibbey Formation	5633	Mississippian	3627
Ledgestone Limestone	5040	Mississippian	4679
Unit A, Red River Formation	5309	Cretaceous	5735
Unit B, Red River Formation	5329	Cretaceous	5506

Page 1 of 1 | Total 1 | Prev | Next



RECEIVED

AUG 3 2006

DEPT OF ENVIRONMENT & NATURAL

WELL COMPLETION OR RECOMPLETION REPORT

Type of Completion: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Injection <input type="checkbox"/> Workover <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Other _____					
Name and Address of Operator: Prima Exploration, Inc. 7555 E. Hampden Ave., Suite 505, Denver, CO 80231					Telephone (303) 755-5681
Name and Address of Drilling Contractor and Rig No: Cyclone Drilling, Cyclone 23 P.O. Box 908, Gillette, WY 82717-3158					
Surface Location of well: Qtr-Qtr, Sec, Twp, Rge, County, feet from nearest lines of section, and latitude and longitude (if available): 210' FSL & 1600' FEL, SW SE, Sec 31-22N-4E					
If Directional, top of pay and bottom hole location from nearest lines of section: BHL #1 1342' FNL & 719' FEL, SE NE, Sec 32-22N-4E #2 2005' FNL & 1793' FEL, SW NE, Sec 31-22N-4E					
Well Name and No. CBRRU 34-31H		Field and Pool, or Wildcat Buffalo		Permit No. 1761	API No. 40-063-20600 Date Issued 8/23/2005
Spud Date 8/29/2005	TD Date 10/16/2005	Compl Date 10/16/2005	Elevation 3059	Total Depth (MD & TVD) 1) 15,714' MD, 8665' TVD 2) 12,220' MD, 8653' TVD	Plug Back TD (MD & TVD) TVD
Producing Interval(s), this Completion, Top, Bottom, Name (MD & TVD) TOPI #1 8936' MD, 8640.5' TVD TOPI #2 9380' MD, 8645.4' TVD BOPI #1 15,714' MD, 8665.44' TVD BOPI #2 12,220' MD, 8653.9 TVD Red River "B"					No. of DST's Run (see page 2) Was Well cored? ✓ No <input type="checkbox"/> Yes List Intervals:
Type Electric and Other Logs Run: GR					Date Directional Survey Submitted

CASING RECORD (Report all strings set in well)						
Hole Size 13 1/2" 8 3/4"	Casing Size 9 5/8" 7"	Weight (lb/ft) 36# 26#	Depth Set 1446' 8877'	Amount Pulled	Sacks and Type of Cement 660 sks 741 sks	Top of Cement

TUBING RECORD				LINER RECORD		
Size	Weight (lb/ft)	Depth Set	Packer Type & Depth	Size	Depth Interval	Sacks and Type of Cement
2 7/8"		8714'	N/A			

PERFORATION RECORD			
Interval/Depth 8936' MD-15,714' MD 9380' MD-12,220' MD	Holes Per Ft. OH OH	Formation Isolated N/A N/A	Amount and Type of Cement used (indicate if squeeze cemented). Amount and Type of Acid and/or Sand used. Use additional page(s) if needed. N/A

Continued on Next Page →

Well Completion or Recompletion Report - Form 4
Page 2

PRODUCTION

Date First Production 1/18/06		Producing Method (Flowing, gas lift, pumping - size and type of pump) Pumping			Well Status (Producing or shut-in) Producing		
Date of Test 3/6/06	Hours Tested 24	Choke Size	Production For Test → Calculate 24 Hour Rate →	Oil (Bbls) 2	Gas (McF) 0	Water (Bbls & %) 310	Oil Gravity - API (Corr.) 33
Flowing Tbg Pressure N/A		Casing Pressure	Calculate 24 Hour Rate →	Oil (Bbls) 2	Gas (McF) 0	Water (Bbls & %) 310	Gas-Oil Ratio
Disposition of Oil (Purchaser and Transporter), and Gas (sold, used for fuel, vented, etc.) Nexen Marketing USA- Purchaser Shell Trading US Company- Transporter					Test Witnessed By Dave Arithson		
List of Attachments/Comments							

GEOLOGIC MARKERS

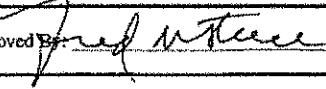
FORMATION NAME AND BRIEF DESCRIPTION	MEASURED DEPTH	TRUE VERTICAL DEPTH
Greenhorn	4572'	
Piper Lime	5640'	
Pine Salt	5824'	
Kibby	6688'	
Lodgepole	8040'	
Red River "A"	8800'	
Red River "B"	8869'	

Use additional page(s) if needed.

DRILL STEM TEST DATA

<input checked="" type="checkbox"/> Drill Stem Test Results Attached			
If not attached, list Depth Interval Tested, Cushion Used, Time Tool Open, Flowing and Shut-in Pressures, and Recoveries.			
Use additional page(s) if needed.			
I hereby certify that the information herein provided is true, complete, and correct as determined from all available records.			
 Signature	Becky Barnes Name (Print)	Regulatory Comp Title	6/19/2006 Date

FOR OFFICE USE ONLY

Approved By:		Title: <u>O.G. Supervisor</u>	Date: <u>AUG 29 2006</u>
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SD EForm - 0439 V1



DEPARTMENT OF ENVIRONMENT and NATURAL RESOURCES
 Minerals & Mining Program - Oil & Gas Section
 2050 West Main, Suite #1, Rapid City, SD 57702-2493
 Telephone: 605-394-2229, FAX: 605-394-5317

FORM 4

RECEIVED

JUN 30 2006

DEPT OF ENVIRONMENT & NATURAL
RESOURCES - RCRD

WELL COMPLETION OR RECOMPLETION REPORT

Type of Completion: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Injection <input type="checkbox"/> Workover <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Other _____					
Name and Address of Operator: Prima Exploration, Inc. 7555 E. Hampden Ave., Suite 505, Denver, CO 80231 Telephone (303) 755-5681					
Name and Address of Drilling Contractor and Rig No: Cyclone Drilling, Cyclone 23 P.O. Box 908, Gillette, WY 82717-3158					
Surface Location of well: Qtr-Qtr, Sec, Twp, Rge, County, feet from nearest lines of section, and latitude and longitude (if available): 210' FSL & 1600' FEL, SW SE, Sec 31-22N-4E					
If Directional, top of pay and bottom hole location from nearest lines of section: BHL #1 1342' FNL & 719' FEL, SE NE, Sec 32-22N-4E #2 2005' FNL & 1793' FEL, SW NE, Sec 31-22N-4E					
Well Name and No. CBRRU 34-31H		Field and Pool, or Wildcat Buffalo		Permit No. 1761	API No. 40-063-20600
Spud Date 8/29/2005	TD Date 10/16/2005	Compl Date 10/16/2005	Elevation 3059	Total Depth (MD & TVD) 1) 15,714' MD, 8665 TVD 2) 12,220' MD, 8653 TVD	Plug Back TD (MD & TVD) TVD TVD
Producing Interval(s), this Completion, Top, Bottom, Name (MD & TVD) TOPI #1 8936' MD, 8640.5' TVD TOPI #2 9380' MD, 8645.4' TVD BOPI #1 15,714' MD, 8665.44' TVD BOPI #2 12,220' MD, 8653.9 TVD Red River "B"					No. of DST's Run (see page 2)
Type Electric and Other Logs Run: GR					Date Directional Survey Submitted

CASING RECORD (Report all strings set in well)

Hole Size 13 1/2" 8 3/4"	Casing Size 9 5/8" 7"	Weight (lb/ft) 36# 26#	Depth Set 1446' 8877'	Amount Pulled	Sacks and Type of Cement 660 sks 741 sks	Top of Cement
TUBING RECORD						

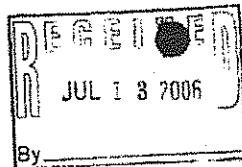
LINER RECORD

Size 2 7/8"	Weight (lb/ft)	Depth Set 8714'	Packer Type & Depth N/A	Size	Depth Interval	Sacks and Type of Cement

PERFORATION RECORD

Interval/Depth 8936' MD-15,714' MD 9380' MD-12,220' MD	Holes Per Ft. OH OH	Formation Isolated N/A N/A	Amount and Type of Cement used (indicate if squeeze cemented). Amount and Type of Acid and/or Sand used. Use additional page(s) if needed. N/A

Continued on Next Page →



Well Completion or Recompletion Report - Form 4
Page 2

PRODUCTION

Date First Production 1/18/06		Producing Method (Flowing, gas lift, pumping - size and type of pump) Pumping				Well Status (Producing or shut-in) Producing	
Date of Test 3/6/06	Hours Tested 24	Choke Size	Production For Test →	Oil (Bbls) 2	Gas (McF) 0	Water (Bbls & %) 310	Oil Gravity - API (Corr.) 33
Flowing Tbg Pressure N/A		Casing Pressure	Calculate 24 Hour Rate →	Oil (Bbls) 2	Gas (McF) 0	Water (Bbls & %) 310	Gas-Oil Ratio
Disposition of Oil (Purchaser and Transporter), and Gas (sold, used for fuel, vented, etc.) Nexen Marketing USA- Purchaser Shell Trading US Company- Transporter					Test Witnessed By Dave Arithson		
List of Attachments/Comments							

GEOLOGIC MARKERS

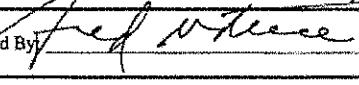
FORMATION NAME AND BRIEF DESCRIPTION	MEASURED DEPTH	TRUE VERTICAL DEPTH
Greenhorn	4572'	
Piper Lime	5640'	
Pine Salt	5824'	
Kibby	6688'	
Lodgepole	8040'	
Red River "A"	8800'	
Red River "B"	8869'	

Use additional page(s) if needed.

DRILL STEM TEST DATA

<input checked="" type="checkbox"/> Drill Stem Test Results Attached			
If not attached, list Depth Interval Tested, Cushion Used, Time Tool Open, Flowing and Shut-in Pressures, and Recoveries.			
Use additional page(s) if needed.			
I hereby certify that the information herein provided is true, complete, and correct as determined from all available records.			
 Signature	Becky Barnes Name (Print)	Regulatory Comp Title	6/19/2006 Date

FOR OFFICE USE ONLY

Approved By:		Title: Supervisor	Date: JUL 06 2006
--------------	---	--------------------------	--------------------------

Quinn 44-36H

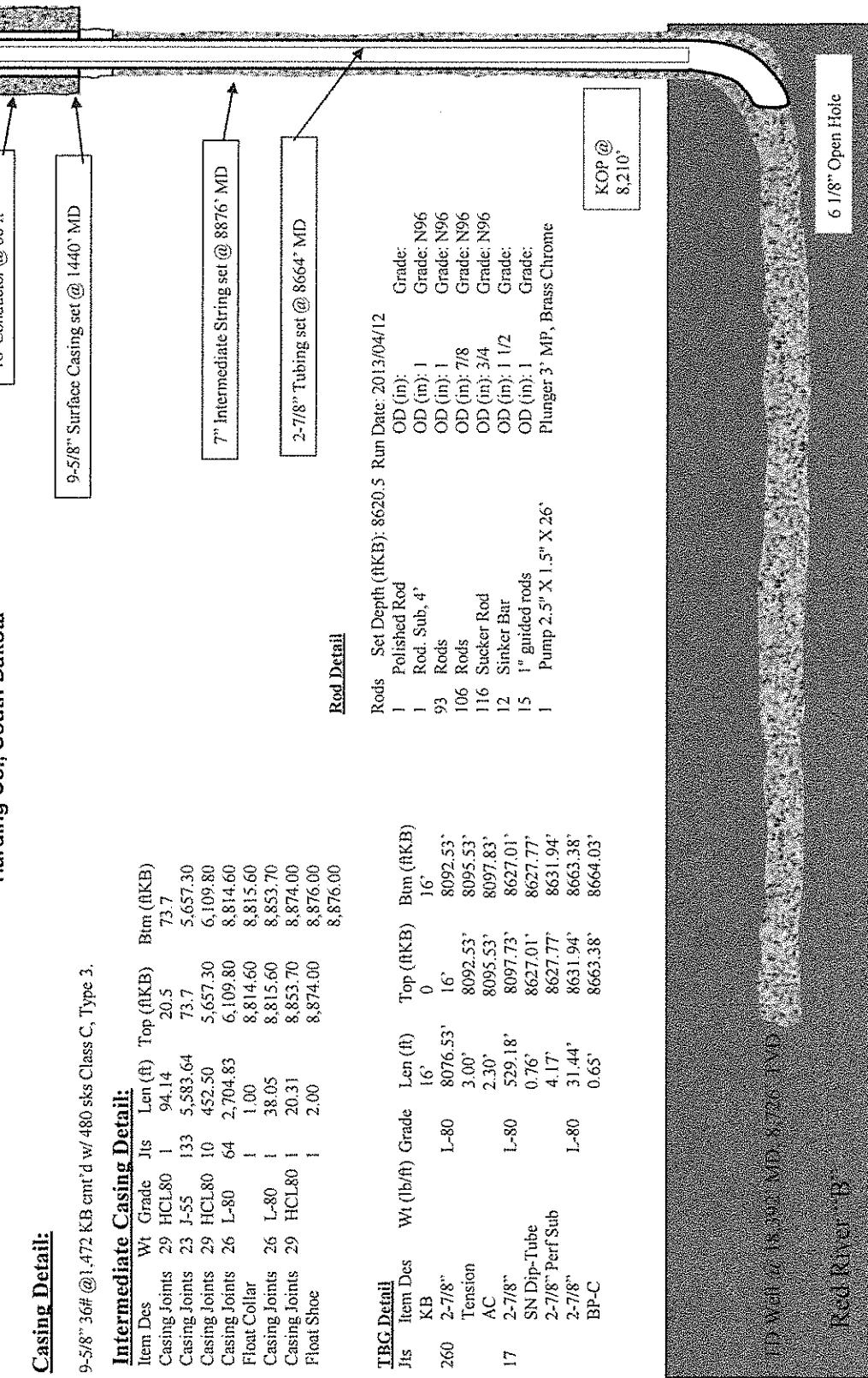
**Section 36, 22N, R3E 250' FSL, 225' FEL
GL: 3,102' KB: 3,122'
Harding Co., South Dakota**

Drilled & Completed: January-February
2012

Casing Detail:

Intermediate Casing Detail:

9-5/8" 36# @ 1,472 KB cmt'd w/ 480 sks Class C, Type 3.



Search

Department of Environment
& Natural Resources
Geological Survey

Oil and Gas Search for API Number: 42-2052977

New Search

Page 1 of 1

Export Well Info to Excel

Export Formation Logs to Excel

Download Database

Page: 1 of 1 Next

Record #1		Well Information	
API No:	42-2052977	County:	Harding
Well Name:	Corn 44-35H	Location:	SESE Sec 35 Imp 02SW 7ng NW
Farmall ID:	1382	Total Depth:	8375
Operator Name:	Continental Resources Inc.	Bottom Hole:	Red River Formation
Permit Date:	03-31-2010	RB Elevation:	3115
Spud Date:	01-30-2012	Ground Elevation:	3393
Plug Date:	45-1828822	Admin Status:	Production
Latitude (DD):	43 00.756	Longitude (DD):	-103 00.756
Well Field:	Buffalo	Well Type:	Oil
		[No Core Pictures Available]	[No Inspection Date]
		View Production Logs	View Geophysical Log Files
		Production Data	Key Log Geophysical Log Files
Formation Logs		Geological Logs	
Formation	Depth (ft)	Formation	Depth (ft)
Greenbank Limestone	3454	Sedgwick Limestone	356
Dakota Sandstone	4535	Crataceous	.1406
Pine Salt, Sperifish Formation	5877	Cretaceous	.2515
Minnehaha Limestone	5925	Pennian	.2527
Charles Formation	6738	Mississippian	.3537
Lodgepole Limestone	7515	Mississippian	.4417
Duperow Formation	8019	Oquinian	.4512
Red River Formation	8631	Orientalian	.5533

Print Prev Next

Page 1 of 1 (0 rows)

SD EForm - 0439 V1



DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES
Minerals & Mining Program - Oil & Gas Section
2050 West Main, Suite #1, Rapid City, SD 57702-2493
Telephone: 605-394-2229, FAX: 605-394-5317

RECEIVED

SEP 21 2012

DEPT OF ENVIRONMENT & NATURAL
RESOURCES - RAPID CITY

WELL COMPLETION OR RECOMPLETION REPORT - Revised

Type of Completion: Oil Well Gas Well Injection Workover Deepen Plug Back Other _____

Name and Address of Operator: **Continental Resources, Inc.** P.O. Box 268870, Oklahoma City, OK 73126 Telephone (405) 234-9000

Name and Address of Drilling Contractor and Rig No: **Cyclone Drilling #1** P.O. Box 908, Gillette, WY 82717-0908

Surface Location of well: Qtr-Qtr, Sec, Twp, Rge, County, feet from nearest lines of section, and latitude and longitude (if available):
SESE Sec 36 T22N R3E, Harding Co., 250' FSL & 225' FEL; Lat: 45 49 15.052; Long: -103 41 15.014

If Directional, top of pay and bottom hole location from nearest lines of section:

Top of Pay: 618' FSL & 585' FEL; BHL: 660' FNL & 871' FEL, Sec 25 T22N R3E

Well Name and No.		Field and Pool, or Wildcat		Permit No.	API No.	Date Issued
Quinn 44-36H		Buffalo Field		1982	40-063-20717	8/31/2010
Spud Date	TD Date	Compl Date	Elevation	Total Depth (MD & TVD)	Plug Back TD (MD & TVD)	
1/8/2012 2/11/2012 4/26/2012 3115 18,392						
Producing Interval(s), this Completion, Top, Bottom, Name (MD & TVD) Top: 8967' MD 8672' TVD BHL: 18,392' MD 8726' TVD Red River "B"					No. of DST's Run (see page 2)	Was Well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes List Intervals:
Type Electric and Other Logs Run: CBL/mud					Date Directional Survey Submitted	

CASING RECORD (Report all strings set in well)

Hole Size	Casing Size	Weight (lb/ft)	Depth Set	Amount Pulled	Sacks and Type of Cement	Top of Cement
13 1/2 8 3/4	9 5/8 7	36 23/26/29	1472 8876		480 sks Class C, Type 3 895 sks Type III	Surface Surface

TUBING RECORD

LINER RECORD

Size	Weight (lb/ft)	Depth Set	Packer Type & Depth	Size	Depth Interval	Sacks and Type of Cement
2 7/8	6.5	8668				

PERFORATION RECORD

Interval/Depth Open Hole	Holes Per Ft.	Formation Isolated	Amount and Type of Cement used (indicate if squeeze cemented). Amount and Type of Acid and/or Sand used. Use additional page(s) if needed.
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Continued on Next Page →

Well Completion or Recompletion Report – Form 4
Page 2

PRODUCTION

Date First Production 04/26/2012		Producing Method (Flowing, gas lift, pumping - size and type of pump) Pumping 1 1/2" Plunger				Well Status (Producing or shut-in) Producing	
Date of Test 04/27/2012	Hours Tested 24	Choke Size N/A	Production For Test → Calculate 24 Hour Rate	Oil (Bbls) 60	Gas (Mcf) 0	Water (Bbls & %) 227	Oil Gravity - API (Corr.) 32.72
Flowing Tbg Pressure 10	Casing Pressure 0			Oil (Bbls) 60	Gas (Mcf) 0	Water (Bbls & %) 227	Gas-Oil Ratio 0
Disposition of Oil (Purchaser and Transporter), and Gas (sold, used for fuel, vented, etc.)						Test Witnessed By	
List of Attachments/Comments							

GEOLOGIC MARKERS

FORMATION NAME AND BRIEF DESCRIPTION	MEASURED DEPTH	TRUE VERTICAL DEPTH
Greenhorn		3464
Dakota Sand		4506
Pine Salt		5677
Minnekahta		6025
Charles		6730
Lodgepole		7515
Duperow		8010
Red River	8734	8631

Use additional page(s) if needed.

DRILL STEM TEST DATA

Drill Stem Test Results Attached

If not attached, list Depth Interval Tested, Cushion Used, Time Tool Open, Flowing and Shut-in Pressures, and Recoveries.

Use additional page(s) if needed.

I hereby certify that the information herein provided is true, complete, and correct as determined from all available records.

Terry L. Olson
Signature

Terry L. Olson
Name (Print)

Reg. Compliance _____
Title _____ Date 9/17/2012

FOR OFFICE USE ONLY

Approved By: _____	Title: _____	Date: _____
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RECEIVED

AUG 20 2012

DEPT OF ENVIRONMENT & NATURAL
RESOURCES - RAPID CITY

August 15, 2012

Department of Environment and Natural Resources
Minerals and Mining Program – Oil and Gas Division
2050 West Main, Suite #1
Rapid City, SD 57702-2493

Re: Quinn 44-36H

Enclosed is a revised copy of the Quinn 44-36H Well Completion Report requested by your office. The revised copy confirms the location of the Bottom Hole and corrects the API number, which was entered incorrectly. If you have any further questions, please do not hesitate to contact me at 405-234-9139 or email the following Terry.Olson@clr.com. Thank you.

Sincerely,

CONTINENTAL RESOURCES, INC.



Terry Olson
Regulatory Compliance Specialist



DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
Minerals & Mining Program - Oil & Gas Section
2050 West Main, Suite #1, Rapid City, SD 57702-2482
Telephone: 605-394-2229, FAX: 605-394-5317

FORM 4
RECEIVED
AUG 20 2012

DEPT OF ENVIRONMENT & NATURAL
RESOURCES - RAPID CITY

WELL COMPLETION OR RECOMPLETION REPORT

Type of Completion: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Injection <input type="checkbox"/> Workover <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Other						
Name and Address of Operator: Continental Resources, Inc. P.O. Box 268870, Oklahoma City, OK 73126			Telephone: (405) 234-9000			
Name and Address of Drilling Contractor and Rig No: Cyclone Drilling, Inc. #1 P.O. Box 908, Gillette, WY 82717-0908						
Surface Location of well: Qtr-Qtr, Sec, Twp, Rge, County, feet from nearest lines of section, and latitude and longitude (if available): SESE Sec 36 T22N R3E, Harding Co., 250' FSL & 225' FEL; Lat: 45 49 15.052; Long: -103 41 15.014						
If Directional, top of pay and bottom hole location from nearest lines of section: Top of Pay: 618' FSL & 585' FEL; BHL: 680' FNL & 871' FEL, Sec 25 T22N R3E						
Well Name and No. Quinn 44-36H		Field and Pool, or Wildcat West Buffalo Red River		Permit No. 1982	API No. 40-063-20717 Date Issued 8/31/2010	
Spud Date 1/8/2012	TD Date 2/11/2012	Compl Date 4/26/2012	Elevation 3115	Total Depth (MD & TVD) 18,392	Plug Back TD (MD & TVD)	
Producing Interval(s), this Completion, Top, Bottom, Name (MD & TVD) Top: 8967' MD 8672' TVD BHL: 18,392' MD 8726' TVD Red River "B"					No. of DST's Run <small>(see page 2)</small>	Was Well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes List Intervals:
Type Electric and Other Logs Run: CBL/mud					Date Directional Survey Submitted	

CASING RECORD (Report all strings set in well)						
Hole Size 13 1/2 8 3/4	Casing Size 9 5/8 7	Weight (lb/ft) 36 23/26/29	Depth Set 1472 8876	Amount Pulled	Sacks and Type of Cement 480 sks Class C, Type 3 895 sks Type III	Top of Cement Surface Surface
TUBING RECORD						
Size 2 7/8	Weight (lb/ft) 6.5	Depth Set 8668	Packer Type & Depth	Size	Depth Interval	Sacks and Type of Cement

PERFORATION RECORD			
Interval/Depth Open Hole	Holes Per Ft.	Formation Isolated	Amount and Type of Cement used (indicate if squeeze cemented). Amount and Type of Acid and/or Sand used. Use additional page(s) if needed.

Continued on Next Page →

Well Completion or Recompletion Report - Form 4
Page 2

PRODUCTION

Date First Production 04/26/2012	Producing Method (Flowing, gas lift, pumping - size and type of pump) Pumping 1 1/2" Plunger				Well Status (Producing or shut-in) Producing		
Date of Test 04/27/2012	Hours Tested 24	Choke Size N/A	Production For Test →	Oil (Bbls) 60	Gas (Mcf) 0	Water (Bbls & %) 227	Oil Gravity - API (Corr.) 32.72
Flowing Tbg Pressure 10	Casing Pressure 0	Calculate 24 Hour Rate →		Oil (Bbls) 60	Gas (Mcf) 0	Water (Bbls & %) 227	Gas-Oil Ratio 0
Disposition of Oil (Purchaser and Transporter), and Gas (sold, used for fuel, vented, etc.)					Test Witnessed By		
List of Attachments/Comments							

GEOLOGIC MARKERS

FORMATION NAME AND BRIEF DESCRIPTION	MEASURED DEPTH	TRUE VERTICAL DEPTH
Greenhorn		3464
Dakota Sand		4506
Pine Salt		5677
Minnekahta		6025
Charles		6730
Lodgepole		7515
Duperow		8010
Red River	8734	8631

Use additional page(s) if needed.

DRILL STEM TEST DATA

<input checked="" type="checkbox"/> Drill Stem Test Results Attached
If not attached, list Depth Interval Tested, Cushion Used, Time Tool Open, Flowing and Shut-in Pressures, and Recoveries.
Use additional page(s) if needed.
I hereby certify that the information herein provided is true, complete, and correct as determined from all available records.

<u>Terry L. Olson</u> Signature	Terry L. Olson Name (Print)	Reg. Compliance Title	8/15/2012 Date
------------------------------------	--------------------------------	--------------------------	-------------------

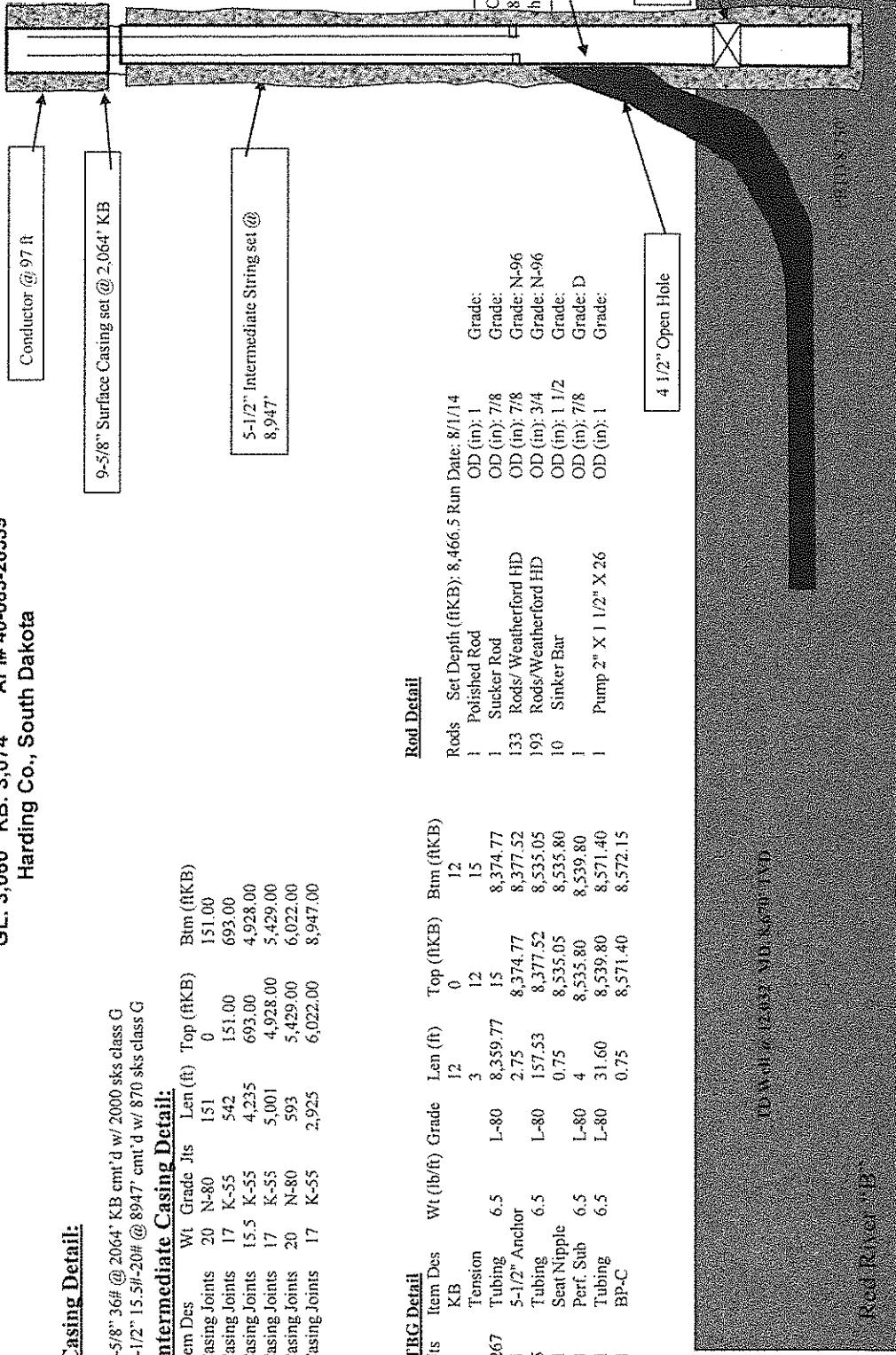
FOR OFFICE USE ONLY

Approved By: _____	Title: _____	Date: _____
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Thune B 1-30
Section 30, 22N, 4E 1320' FNL, 660' FEL
GL: 3,060' KB: 3,074' API# 40-063-20359
Harding Co., South Dakota

Drilled & Completed: March 1983

Re-Drilled: March 2008



New South

Page 1 of 1

Oil and Gas Search ID: API Number: 48-03-2016-0048

Export To Excel

Excel Format / Tops to Eew

Download Databases

Page 1 of 1

Permit # 48

API No.: 48-03-2016-0048
Well Name: Phillips 130 Phase B
Permit ID: 1230
Operator Name: Continental Resources Inc.
Permit Date: 28-25-1932
Spud Date: 10-14-1932
Plug Date:
Latitude (DD): 45 04.5466
Well Field: Surface

Print Data

New Geophysical Logs

No Log Pictures Available

No Log Pictures Available

Formation

Greenhorn Limestone
Fall River Sandstone
Pina Sh. Spearfish Formation
Mission Canyon Limestone
Red River Formation
Unit B, Red River Formation
Unit C, Red River Formation
Unit D, Red River Formation

Depth (ft.)

3002
4463
5680
7162
9550
8692
8756
8812

Key for Geophysical Log Type

Geological Age

Cretaceous
Cretaceous
Pennian
Mississippian
Ortonian
Ortonian
Ortonian
Ortonian

Elevation

442
-1034
-2621
-4193
-5931
-5333
-5659
-5753

Original Oil Well Log

Print Prev Next

FORM 4
RECEIVED

OCT 23 2008

DEPT OF ENVIRONMENT & NATURAL
RESOURCES - RAPID CITY

WELL COMPLETION OR RECOMPLETION REPORT

Type of Completion: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Injection <input type="checkbox"/> Workover <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input checked="" type="checkbox"/> Other Re-Entry					
Name and Address of Operator: Prima Exploration, Inc.			Telephone (303) 755-5681		
Name and Address of Drilling Contractor and Rig No: J & R Well Service Rig #8					
Surface Location of well: Qtr-Qtr, Sec, Twp, Rge, County, feet from nearest lines of section, and latitude and longitude (if available): 1320' FNL 660' FEL, SW/NW Sec 30-22N-04E					
If Directional, top of pay and bottom hole location from nearest lines of section: TOPI - 1377' FSL 678' FEL Sec 30-22N-04E BHL - 751' FSL 1532' FEL Sec 30-22N-04E					
Well Name and No. Thune B #1-30		Field and Pool, or Wildcat Buffalo		Permit No. 1850	API No. 40 06320359.01
Spud Date 1/10/2008	TD Date 1/15/2008	Compl Date 3/1/2008	Elevation 3074' KB 3060' GL	Total Depth (MD & TVD) 12032' MD 8670' TVD	Plug Back TD (MD & TVD)
Producing Interval(s), this Completion, Top, Bottom, Name (MD & TVD) TOPI - 8725' MD; 8690' TVD Red River "B" BOPI - 12032' MD; 8670' TVD					No. of DST's Run (see page 2)
Type Electric and Other Logs Run:					Date Directional Survey Submitted

CASING RECORD (Report all strings set in well)

Hole Size 13 1/2" 7 7/8"	Casing Size 9 5/8" 5 1/2"	Weight (lb/ft) 36# 15.5 - 20#	Depth Set 2064' 8947'	Amount Pulled	Sacks and Type of Cement 2000 870	Top of Cement

TUBING RECORD

Size 2 7/8"	Weight (lb/ft)	Depth Set 8593'	Packer Type & Depth	Size	Depth Interval	Sacks and Type of Cement

PERFORATION RECORD

Interval/Depth 8725' - 12032'	Holes Per Ft. OH	Formation Isolated CIBP @ 8659'	Amount and Type of Cement used (indicate if squeeze cemented). Amount and Type of Acid and/or Sand used. Use additional page(s) if needed.

Continued on Next Page →

Well Completion or Recompletion Report - Form 4
Page 2

PRODUCTION

Date First Production 03/01/2008		Producing Method (Flowing, gas lift, pumping - size and type of pump) Pumping				Well Status (Producing or shut-in) Producing	
Date of Test 03/06/2008	Hours Tested 24	Choke Size 0	Production For Test → Calculate 24 Hour Rate	Oil (Bbls) 184	Gas (Mcf) 0	Water (Bbls & %) 185	Oil Gravity - API (Corr.) 32.0
Flowing Tbg Pressure 0		Casing Pressure 0	Oil (Bbls) 184	Gas (Mcf) 0	Water (Bbls & %) 185	Gas-Oil Ratio	
Disposition of Oil (Purchaser and Transporter), and Gas (sold, used for fuel, vented, etc.) Oil Purchaser & Transporter - Nexen Marketing USA Gas - Used for Fuel						Test Witnessed By	
List of Attachments/Comments							

GEOLOGIC MARKERS

FORMATION NAME AND BRIEF DESCRIPTION	MEASURED DEPTH	TRUE VERTICAL DEPTH
Greenhom		3502'
Dakota Silt		4463'
Pine Salt		5680'
Mission Canyon		7162'
Red River		8650'
Red River "B"		8692'

Use additional page(s) if needed.

DRILL STEM TEST DATA

<input type="checkbox"/> Drill Stem Test Results Attached	If not attached, list Depth Interval Tested, Cushion Used, Time Tool Open, Flowing and Shut-in Pressures, and Recoveries.		
Use additional page(s) if needed.			
I hereby certify that the information herein provided is true, complete, and correct as determined from all available records.			
<u>Christi Scritchfield</u> Signature	Christi Scritchfield Name (Print)	Regulatory Compl. Title	10/17/2008 Date

FOR OFFICE USE ONLY

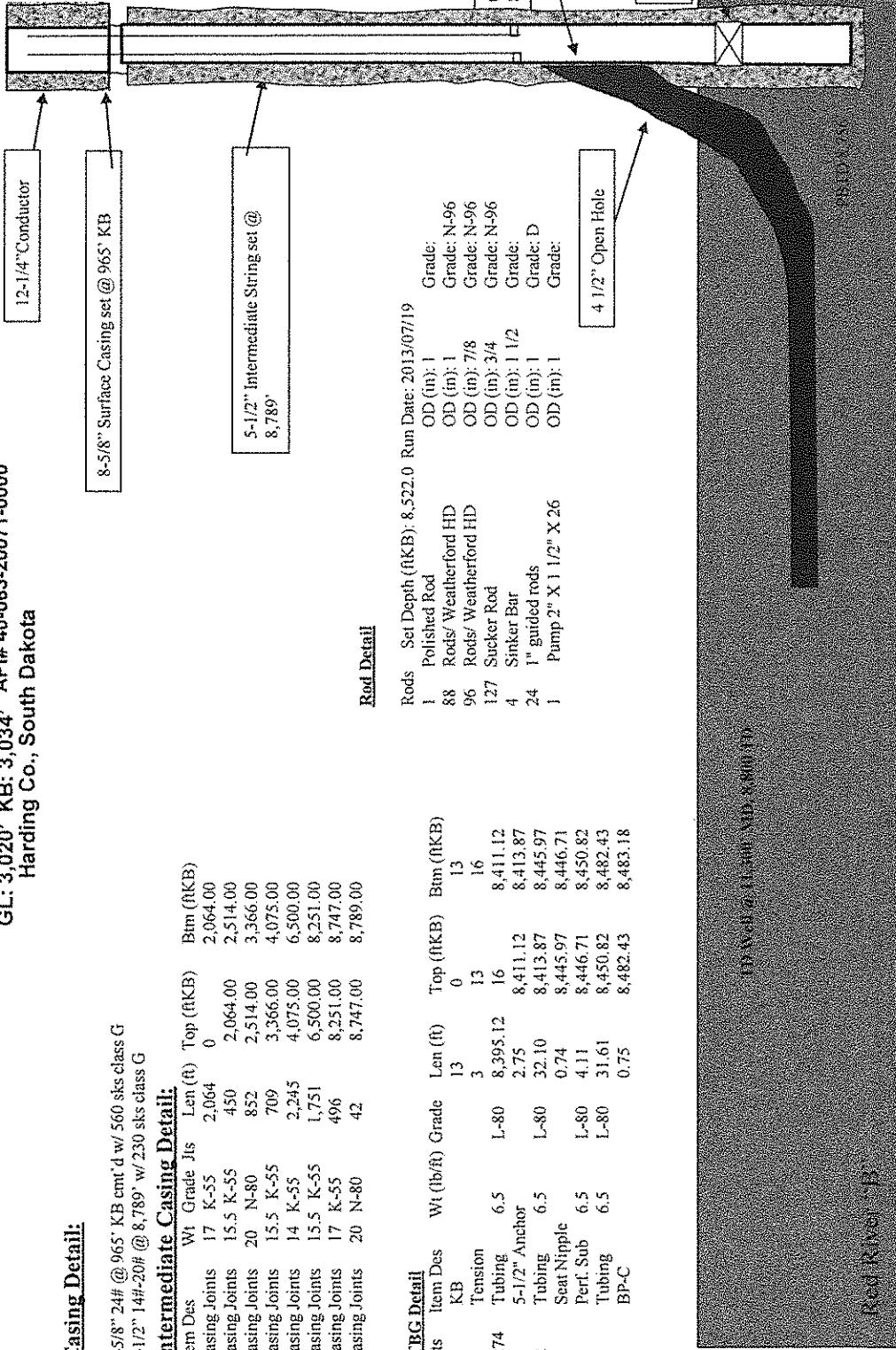
Approved By:	<u>Christi Scritchfield</u>	Title: O&G Supervisor	Date: OCT 23 2008
--------------	-----------------------------	-----------------------	-------------------

Thune A-1

Section 31, 22N, 4E 1700' FNL, 1700' FEL
 GL: 3,020' KB: 3,034' API# 40-063-20071-0000
 Harding Co., South Dakota

Drilled & Completed: October 1973

Re-Drilled: May 2005





Oil and Gas Search for API Number 40001230071			
Export PDF	Download Database		
Export Excel	Print		
Export Text	Next		
Permit Details			
<p>API No: 40001230071 Well Name: Ph 12 1 Thru A Permit ID: 609 Operator Name: Continental Resources Inc. Permit Date: 07-18-1973 Spud Date: 07-27-1973 Plug Date: Latitude (DD): 45.22993 Longitude (DD): -102.37753 Well Field: Permit File</p>			
Well Information			
<p>County: Harding Section: SW 1/4 Sec 31 Twp C22N Rng 14E Location: ESE 80' from River Total Depth: 8000 ft Bottom Hole: Red River Formation KB Elevation: 304 Ground Elevation: 320 Admin Status: Productive Latitude (DD): 45.22993 Longitude (DD): -102.37753 Well Type: Oil</p>			
<p>View Geophysical Logs</p>			
Geological Logs			
View Geological Logs			
Geological Log Data			
Formation	Depth (ft)	Geological Log	Elevation
Plus Sh., Spearfish Formation	5633	Permian	3613
Minnehaha Limestone	5925	Permian	2985
Opsche Shale	5970	Permian	2950
Minnelusa Formation	6046	Permian/Pennsylvanian	3020
1st Loc Sandstone, Minnelusa Formation	5246	Pennsylvanian	3180
Three Forks Shale	7768	Devonian	4740
Intrabase Dolomite	8122	Shurian	5102
Gunkin, Stony Mountain Formation	8410	Cambrian	5390
Sandy Mountain Formation	8544	Ordovician	5524
Red River Formation	8573	Ordovician	5553
Unit B, Red River Formation	8617	Ordovician	5597
Unit C, Red River Formation	8650	Ordovician	5670
Unit D, Red River Formation	8731	Ordovician	5717
Print			

WELL COMPLETION OR RECOMPLETION
REPORT AND LOG

PART OR LEASE NAME
Thunder P&G
WELL NO.
1

FIELD AND FLOOR OR WILDCAT

TYPE OF COMPLETION

Oil Well Gas Well
 New Well Work-Over Deepen Plug Back Same Zone Diff Zone

OPERATOR Phillips Petroleum Company

ADDRESS

Box 2920, Casper, Wyoming 82601
 LOCATION (DO NOT WRITE NAMES OF TOWNS OR CITIES IN LEASE OR SECTION WHERE POSSIBLE)
 Section 17, Twp 8 N, Sec. 31-T22-R4E
 Black Hills Meridian

Top Prod. Interval

At Total Depth

API #C-069-2001

PERMIT NO.	DATE ISSUED	PREVIOUS PERMIT NO.	DATE ISSUED
600	7/20/73		
DATE ISSUED	DATE V.D. REACHING	DATE PAVING Ready to Prod.	PERMIT NO. (DE, ISR, RT, CR, SOR)*
7/23/73	8/25/73	9/26/73	2034-100
TOTAL DEPTH IN FT & YDS	PLUG BACK IN FT & YDS	OF MULTIPLE COUPLES HOW MANY	INTERVALS CHILLED IN
6303	8756		ROTARY TOOLS CABLE TOOLS
PRODUCTION INTERVALS THIS COMPLETION, TOP, BOTTOM, NAME OF PUMP & TYPE			
Red River #P Zone Perfo 6517-2622			
TYPE ELECTRIC AND OTHER LOGS RUN HERE (check one box)			
<input checked="" type="checkbox"/> Oil, <input type="checkbox"/> Gas, <input type="checkbox"/> Correlation log			
CASING RECORDS (PRINT IN BLOCK LETTERS)			
CASING SIZE	DEPTH SET (INCH)	HOLE SIZE	WEIGHT LBS/JFT
6-3/4"	201	12-5/8"	240
5-1/2"	5827	10-3/4"	100
CASING STICKING DATE TYPICAL PRESSURE THICKNESS COMPLETION DATE PRESSURE THICKNESS			
TUBING RECORD DATE TYPICAL PRESSURE THICKNESS COMPLETION DATE PRESSURE THICKNESS			
FRACTURING DATE FIRST FRACTURE PRESSURE METHOD (Flowing, 200 ft. pumpdown, etc.) & type of pump WELL SPANNED Prod. or other			
9/21/73	Flowing	- 1-1/2" Insert Pump	Gas
WELL TEST PRESSURE DATE TEST TEST TYPE	TEST DATE TEST TYPE	TEST DATE TEST TYPE	TEST DATE TEST TYPE
10/1/73	24	24	12
FLOW TEST PRESSURE DATE TEST TEST TYPE	TEST DATE TEST TYPE	TEST DATE TEST TYPE	TEST DATE TEST TYPE
-	-	24	12
DISBURSEMENT OF GAS (check box for fuel, vented, etc.)			
<input checked="" type="checkbox"/> Used for Fuel			
LIST OF ATTACHMENTS			
I hereby declare the foregoing and attached documents to be true and correct to the best of my knowledge and belief from records.			
_____ F. G. MORAN Manager			
APPROVED Date _____			
S. Dakota Oil & Gas Board Denver Prod. File			
OCT 19 1973 S. Dak. Oil & Gas Board Secretary			

- 3 - S. Dakota Oil & Gas Board
1 - Denver Prod.
1 - File

Thomas B 1R
Section 32 T22N R4E 908' FSL, 1748' FEL
GL 3,038' & 3,050' KB
Harding County, South Dakota

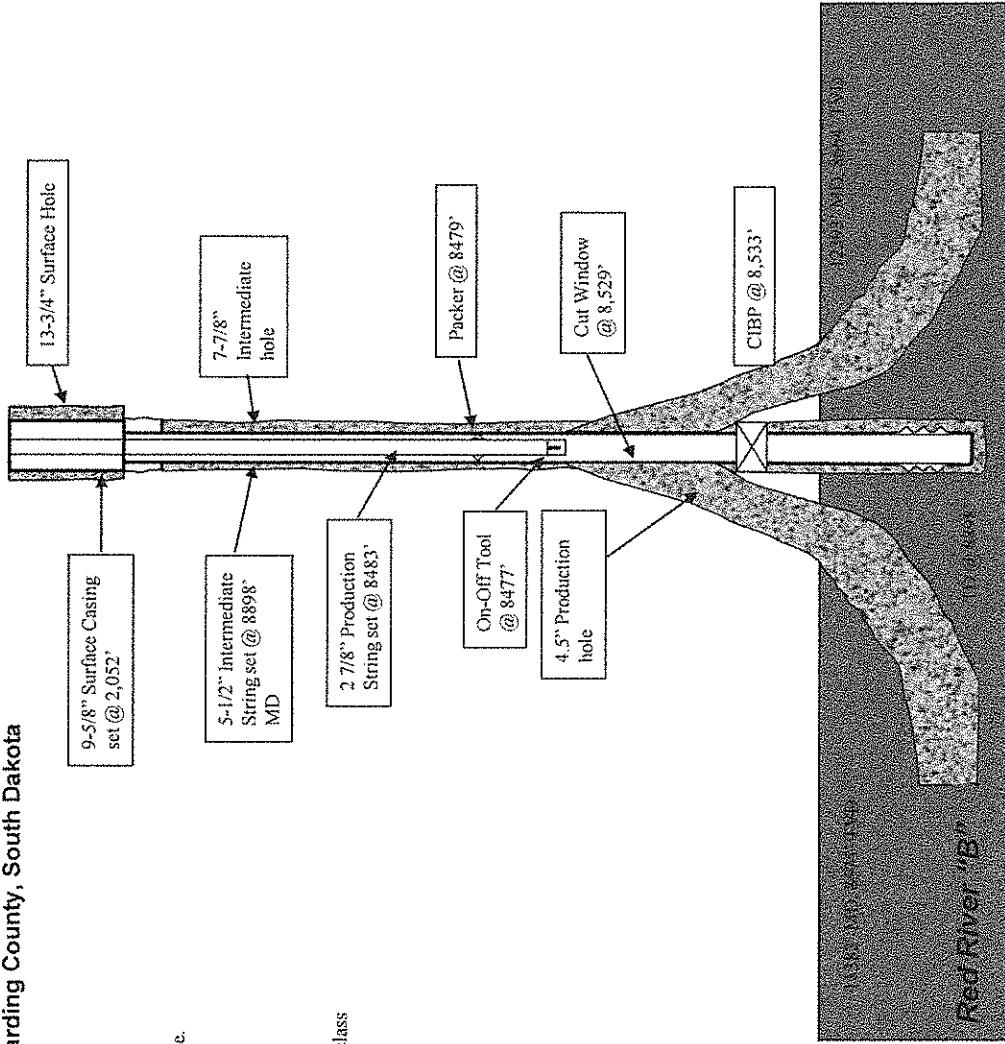
Spud: 11-10-82
 Re-completion: 4/05

Casing Detail:

9 5/8"; Set @ 2,052' MD. Cm't'd w/ 1360 sks class G, BJ Lite.

Production Casing Detail:

5 1/2"; Set @ 8898 MD 15' & 17# csg. Cm't'd w/ 600 sks class G, 270 sks BJ Lite



New Search

Page 1 of 1

Oil and Gas Search for API Number: 40 033 12390

Export WellInfo to Excel

Export Formation Topo to Excel

Period 10/4

Well Information

API No:	40 033 12390	County:	Hetting
Well Name:	Phillips 141 Terres B	Location:	NE NW Sec 42 Twp 022N Rng 74E
Permit ID:	1241	Total Depth:	8840
Operator Name:	Continental Resources Inc.	Bottom Hole:	Red River Formation
Permit Date:	2025-10-22	RB Elevation:	3650
Spud Date:	2018-01-02	Ground Elevation:	3628
Plug Date:	2018-01-02	Admin Status:	Plugged [00]
Latitude [DD]	45.832386	Longitude [DD]:	-93.655236
Well Field:	Surfide	Well Type:	Water injection

Production Date

Permit File

View Geospatial Logs

[No Injection Logs]

Key for Geological Log Types

Formation	Depth (ft.)	Sedimentary	Fraction
Greenhorn Limestone	3455	Cretaceous	427
Fall River Sandstone	4126	Cretaceous	1388
Pine Salt, Sparfish Formation	5538	Parmian	2650
Mission Canyon Limestone	7120	Mississippian	4012
Three Forks Shale	7610	Devonian	4572
Red River Formation	8628	Ordovician	5570
Unit B, Red River Formation	8648	Ordovician	5510
Unit C, Red River Formation	8718	Ordovician	5630
Unit D, Red River Formation	8758	Ordovician	5730

Page: 1 of 1 | First | Previous | Next | Last |

WELL COMPLETION OR RECOMPLETION REPORT AND LOG				FARM OR LEASE NAME			
				Thomas B			
				WELL NO.			
				IR			
				FIELD AND POOL OR WILDCAT			
				Buffalo-Red River			
				NO. ACRES IN LEASE			
				320			
				N. N. SEC. TWP. RGE.			
				NE NW, Sec. 32-T22N-R4E			
				COUNTY			
				Harding			
At total depth				API #40-063-20360			
PERMIT NO. 1241	DATE ISSUED 9/29/82		PREVIOUS PERMIT NO. --		DATE ISSUED		
DATE SPUDDED. 11/10/82	DATE T.D. REACHED 12/3/82	DATE COMPL. (Ready to Prod.) 3/23/83	ELEVATIONS (DP, RKB, RT, GR, etc.) GR 3038' RKB 3050'	ELEV. CASINGHEAD FLG.E 3038'			
TOTAL DEPTH (MD & TVD) 8900' 8735	PLUG BACK T.D. (MD & TVD) 8735	IF MULTIPLE COMPL. HOW MANY? --	INTERVALS BILLED BY	ROTARY TOOLS 0 - 8900'	CABLE TOOLS --		
PRODUCING INTERVAL(S), THIS COMPLETION, TOP, BOTTOM, NAME (MD & TVD)* 8648' - 8654' Red River "B"				DATE DIRECTIONAL SURVEY SUBMITTED NA			
TYPE ELECTRIC AND OTHER LOGS RUN (Circle those used) BHC-Sonic GR-CAL				WAS WELL CORED NO			
CASING RECORD (Report all strings set in well)							
CASING SIZE 9-5/8"	DEPTH SET (MD) 2052'	HOLE SIZE 13-1/2"	WEIGHT LBS./FT. 36#	PURPOSE Surface	SACKS CEMENT 1000 sx BJ Lite		
					300 sx Class I G		
5-1/2"	8898'	7-7/8"	17 & 20#	Production	600 sx Class I G		
					270 sx BJ Lite		
LINER RECORD							
SIZE --	TOP (MD) --	BOTTOM (MD) --	SACKS CEMENT --	SCREEN (MD) --	SIZE 2-7/8" DEPTH SET (MD) 8728'		
TUBING RECORD							
SIZE --	TOP (MD) --	BOTTOM (MD) --	SACKS CEMENT --	SCREEN (MD) --	SIZE DEPTH SET (MD) --		
PERFORATION RECORD							
DEPTH INTERVAL (MD) 8648-8654'	HOLDS PER FT. 4 SPF	SIZE AND TYPE 4" csg gun	PURPOSE Production	ACID, SHOT, FRAC., CEMENT SQUEEZE, ETC. Acidized w/300 gal	DEPTH INTERVAL (MD) 8648-8654'		
				Blend A20-2, tailed in w/300 gal 2%			
				KCL wtr w/l gal Aquaflow. Displd w/2%			
PRODUCTION							
DATE FIRST PRODUCTION 1/11/83	PRODUCING METHOD (Flowing, gas lift, pumping,--size & type of pump) Pumping			WELL STATUS (Prod. or shut-in) Producing			
DATE OF TEST 4/18/83	HOURS TESTED 24	CHOKESIZE --	PRODUCTION FOR TEST -->	OIL, BBL. 24	GAS, Mcf. 7	WATER, BBL. &% 78	OIL GRAVITY-API (corr.) 33
FLOW, TUBING PRESSURE, Casing PRESSURE --	--	--	CALCULATED 24-HOUR RATE -->	OIL, BBL. 24	GAS, Mcf. 7	WATER, BBL. &% 78	GAS-OIL RATIO 292
DISPOSITION OF GAS (Hold, used for fuel, vented, etc.) Used for fuel				TEST WITNESSED BY			
LIST OF ATTACHMENTS None							
I hereby certify that the foregoing and attached information is complete and correct as determined from all available records							
SIGNED <i>A.F. Stuart</i>	TITLE Area Manager			DATE 4/20/83			
DO NOT WRITE BELOW THIS LINE *See Instructions On Reverse Side							
APR 25 1983							
Approved Date _____ Z - State of SD 1 - B'Ville-Conner 1 - Billings, Harrison	1 - Whitmire 1 - Cuffelt 1 - Fraser			1 - File			
OIL AND GAS BOARD OF THE STATE OF SOUTH DAKOTA 							

(5) Information on abandoned and active water wells, as follows:

(a) Abandoned water wells: None

- (i) The legal location;
- (ii) Well name; and
- (iii) Method of abandonment, if available;

(b) Active water wells: There is one active water well within a $\frac{1}{2}$ mile radius of CBRRU 24-31NH. Tim Brown is the owner of the water well.

(i) The legal location; 45.827309, -103.675718. Located in the middle of T22N R4E S31

(ii) Well name: NA

(iii) NA

(iv) The construction program, including casing size and type, if available; See Attached. Casing Size and Type: 2 lb/ft 5" plastic pipe to 240'.

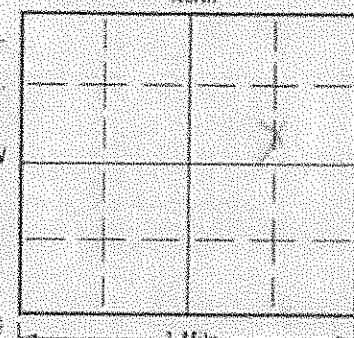
The well is owned by Tim Brown. The well was drilled and completed September 2003 to a depth of 240'.

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location W 14 Sec 31 Two Rg 4County Hettington North

Please mark well location with an "X"



Well Completion Data

S-3-03

1 Mile →

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 500 ft from outhouse (identify source)

PROPOSED USE:

- Domestic/Stock Municipal Business Test Holes
 Irrigation Industrial Institutional Monitoring well

METHOD OF DRILLING:

CASING DATA: Steel Plastic Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
		lb./gal	ft	ft
		lb./gal	ft	ft

Describe grouting procedure _____

SCREEN: Perforated pipe ManufacturedDiameter 6 IN Length 110 FEETMaterial SteelSlot Size .125 Set From 100 Feet to 200 Feet

Other information _____

WAS A PACKER OR SEAL USED? YES NO

If so, what material?

Describe packer(s) and location?

DISINFECTION: Was well disinfected upon completion?

YES, How Chlorine

Laboratory sent to for water quality analysis

NO, Why Not? _____

Well Owner Tim Larson

Business Name _____

Address _____

WELL LOG:

FORMATION	DEPTH FROM	TO
<u>Otay</u>	<u>0</u>	<u>150</u>
<u>Sand</u>	<u>150</u>	<u>200</u>
<u>Otay</u>	<u>200</u>	<u>240</u>

STATIC WATER LEVEL

110

Feet

If flowing: closed in pressure _____

PSI

GPM flow _____ through _____ inch pipe

inch pipe

Controlled by Valve Reducers Other _____

Reduced Flowrate _____

GPM

Can well be completely shut off? _____

WELL TEST DATA:

 Pumped Describe 100 ft/min Bailed _____ Other _____

Pumping Level Below Land Surface

100 ft After 1 Hrs. pumped 100 GPM100 ft After 1 Hrs. pumped 100 GPM

If pump installed, pump rate _____ GPM

REMARKS

RECEIVED

MAY 17 2004

WATER RIGHTS
PROGRAMThis well was drilled under license # RG 7

And this report is true and accurate.

Drilling firm Landmark Drilling

Signature of License Representative _____

Signature of Well Owner or Equitable Property Holder _____

Date _____

(10) The source and nature of the substance or substances to be injected, its viscosity, its compatibility with the receiving formation, including stability indices, and the estimated average and maximum daily amounts to be injected. If the nature of the injected fluid is produced water, a water quality analysis must be submitted and must include information on total dissolved solids content, chlorides, sodium, sulfates, nitrates, and hydrocarbons;

See attach water analysis from Jacam Laboratories. The water for injection will all be from the Red River Formation from the Central Buffalo Red River Unit wells, Buffalo Red River Unit wells, and Table Mountain #1-7F well. The attached water analysis data sheets are for CBRRU wells, BRRU wells, and the Table Mountain well. The analysis also includes various combinations of water from the above sources to test for compatibility and scaling tendencies. Jacam states that there is a potential to precipitate iron carbonate and iron sulfide, although this issue can be eliminated by treating with 50 ppm WWT 1900 chemical.

Water Analysis

Analysis #10000

Company: PRIMA EXPLORATION
 Field: PRIMA EXPLORATION
 Lease: CBRRU THUNE FEDERAL
 Location: BUFFALO CO., SD
 Description: TREATER
 Well:
 Sample Point: BLEEDER



JACAM Chemicals, L. L. C.
 205 S. Broadway
 P.O. Box 95
 STEHLING, KS 67579
 820-278-3355
 Fax 820-278-2112
 Web: www.jacam.com
 Email: solutions@jacam.com

Date: July 25, 2005

Attention: JESSE SMYLE

DISSOLVED SOLIDS

CATIONS	mg/l	meq/l
Sodium, Na (calc)	4,985.48	216.76
Calcium, Ca	800.00	39.80
Magnesium, Mg	636.84	52.20
Barium, Ba	0.00	0.00
Iron, Fe	100.00	5.38

ANIONS	mg/l	meq/l
Hydroxyl, OH		
Carbonate, CO3		
Bicarbonate, HCO3	514.00	8.41
Sulfate, SO4	2,750.00	56.35
Chloride, Cl	7,000.00	197.18
Sulfide, S	0.00	0.00

OTHER PROPERTIES

pH	7.00
Specific Gravity	1.005
Dissolved Oxygen, (mg/l)	
Dissolved Carbon Dioxide	35.20
Sulfide as H2S, (ppm)	0.00
Sample Temp:	91F. 33C.

Total Dissolved Solids (mg/l)	16,786
Total Ionic Strength	0.3619
Maximum CaSO4, (calc.)	2,729
Maximum BaSO4, (calc.)	0
Total Hardness	4,600.00
	92.00

ESTIMATED MINERAL CONTENT AT SAMPLE TEMPERATURE

	meq/l	mg/l	lbs/kbb
CaCO3	0.00	0.00	0.00
CaSO4	40.08	2,729.00	956.00
BaSO4	0.00	0.00	0.00

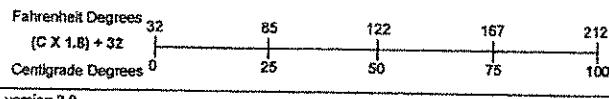
Note:
 Since scale forming molecules can exist in solution, refer to the CaCO3 saturation index for CaCO3, or the solubilities for CaSO4 and BaSO4, and compare with the calculated amounts above to determine if precipitated scale may be possible.

Conclusion:

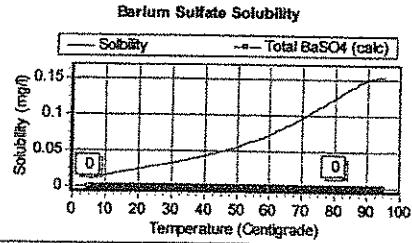
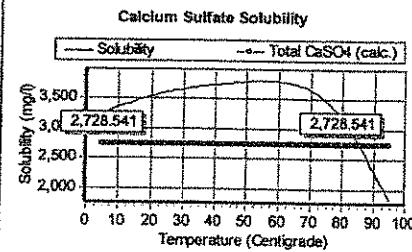
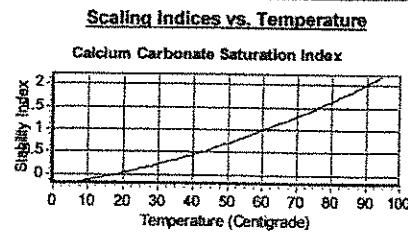
Calcium Carbonate scaling index is positive above 18 degrees Centigrade.
 Calcium Sulfate scale is indicated. See appropriate chart for temperature ranges.
 Barium Sulfate scale is not indicated from 0 to 100 degrees Centigrade.

Remarks:

SAMPLE WATER IS PALE ORANGE.



version 2.0



Water Analysis

Analysis #10002

Company: PRIMA EXPLORATION

Field: PRIMA EXPLORATION

Lease: CBRRO THUNE A

Location: BUFFALO CO., SD

Description: TREATER

Well:

Sample Point: BLEEDER



JACAM Chemicals, L. L. C.

205 S. Broadway

P.O. Box 96

STERLING, KS 67578

Fax 620-278-2112

Web: www.jacam.com

Email: solutions@jacam.com

Date: July 25, 2005

Attention: JESSE SMYLE

DISSOLVED SOLIDS

CATIONS	mg/l	meg/l
Sodium, Na (calc)	6,681.04	290.48
Calcium, Ca	720.00	35.82
Magnesium, Mg	1,027.00	84.18
Barium, Ba	0.00	0.00
Iron, Fe	15.00	0.81

ANIONS	mg/l	meg/l
Hydroxyl, OH		
Carbonate, CO ₃		
Bicarbonate, HCO ₃	396.50	6.49
Sulfate, SO ₄	1,900.00	38.93
Chloride, Cl	10,000.00	281.69
Sulfide, S	0.00	0.00

OTHER PROPERTIES

pH	7.00
Specific Gravity	1.010
Dissolved Oxygen, (mg/l)	
Dissolved Carbon Dioxide	28.20
Sulfide as H ₂ S, (ppm)	0.00
Sample Temp:	116F. 47C.

Total Dissolved Solids (mg/l)	20,740
Total Ionic Strength	0.4503
Maximum CaSO ₄ , (calc.)	2,459
Maximum BaSO ₄ , (calc.)	0
Total Hardness	6,000.00
	120.00

ESTIMATED MINERAL CONTENT AT SAMPLE TEMPERATURE

	mg/l	mg/l	lbs/kbbl
CaCO ₃	0.00	0.00	0.00
CaSO ₄	36.12	2,459.00	862.00
BaSO ₄	0.00	0.00	0.00

Note:

Since scale forming molecules can exist in solution, refer to the CaCO₃ saturation index for CaCO₃, or the solubilities for CaSO₄ and BaSO₄, and compare with the calculated amounts above to determine if precipitated scale may be possible.

Conclusion:

Calcium Carbonate scaling index is positive above 31 degrees Centigrade.
 Calcium Sulfate scale is indicated. See appropriate chart for temperature ranges.
 Barium Sulfate scale is not indicated from 0 to 100 degrees Centigrade.

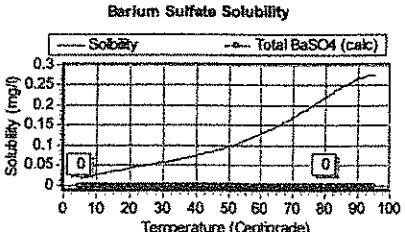
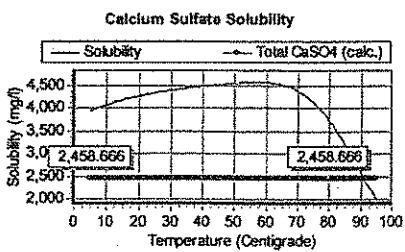
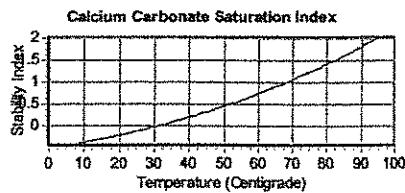
Remarks:

SAMPLE WATER IS BLACK.

Fahrenheit Degrees	32	85	122	167	212
(C X 1.8) + 32					
Centigrade Degrees	0	25	50	75	100

version 2.0

Scaling Indices vs. Temperature



Water Analysis

Analysis #10001

Company: PRIMA EXPLORATION
 Field: PRIMA EXPLORATION
 Lease: CBRU SERLES A
 Location: BUFFALO CO., SD
 Description: TREATER
 Well:
 Sample Point: BLEEDER



JACAM Chemicals, L. L. C.

205 S. Broadway
 PO Box 96
 STERLING, KS 67579
 620-278-3355
 Fax 620-278-2112
 Web: www.jacam.com
 Email: solutions@jacam.com

Date: July 25, 2005

Attention: JESSE SMYLE

DISSOLVED SOLIDS

CATIONS	mg/l	meq/l
Sodium, Na (calc)	5,574.28	242.36
Calcium, Ca	1,000.00	49.75
Magnesium, Mg	808.25	66.25
Barium, Ba	0.00	0.00
Iron, Fe	500.00	26.88

ANIONS	mg/l	meq/l
Hydroxyl, OH		
Carbonate, CO ₃		
Bicarbonate, HCO ₃	213.50	3.49
Sulfate, SO ₄	1,650.00	33.81
Chloride, Cl	10,000.00	281.69
Sulfide, S	0.00	0.00

OTHER PROPERTIES

pH	6.80
Specific Gravity	1.005
Dissolved Oxygen, (mg/l)	
Dissolved Carbon Dioxide	35.20
Sulfide as H ₂ S, (ppm)	0.20
Sample Temp:	101 F. 38C.

Total Dissolved Solids (mg/l)	19,746
Total Ionic Strength	0.4153
Maximum CaSO ₄ , (calc.)	2,350
Maximum BaSO ₄ , (calc.)	0
Total Hardness	5,800.00
	116.00

ESTIMATED MINERAL CONTENT AT SAMPLE TEMPERATURE

	meq/l	mg/l	lbs/kbbl
CaCO ₃	0.00	0.00	0.00
CaSO ₄	34.53	2,350.00	824.00
BaSO ₄	0.00	0.00	0.00

Note:
 Since scale forming molecules can exist in solution, refer to the CaCO₃ saturation index for CaCO₃, or the solubility for CaSO₄ and BaSO₄, and compare with the calculated amounts above to determine if precipitated scale may be possible.

Conclusion:

Calcium Carbonate scaling Index is positive above 44 degrees Centigrade.
 Calcium Sulfate scale is indicated. See appropriate chart for temperature ranges.
 Barium Sulfate scale is not indicated from 0 to 100 degrees Centigrade.

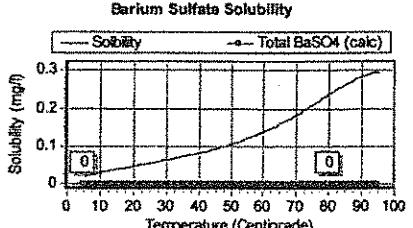
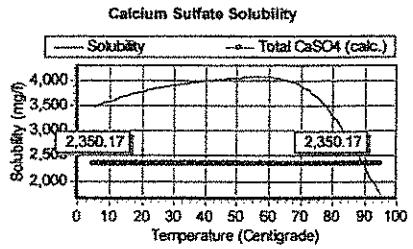
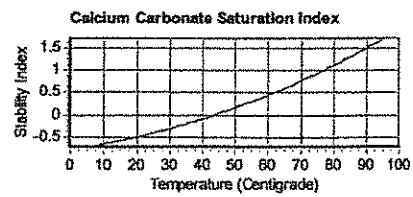
Remarks:

SAMPLE WATER IS PALE BLACK.



version 2.0

Scaling Indices vs. Temperature



Water Analysis

Analysis #: 9997

Company: PRIMA EXPLORATION

Field: PRIMA EXPLORATION

Lease: BRRU SWD

Location: BUFFALO CO., SD

Description: RECEIVING TANK

Well:

Sample Point: BLEEDER



JACAM Chemicals, L. L. C.

205 S. Broadway

P.O. Box 96

STERLING, KS 67579

E20-278-3555

Fax 620-278-3113

Web: www.jcam.com

Email: solvrons@jcam.com

Date: July 25, 2005

Attention: JESSE SMYLE

DISSOLVED SOLIDS

CATIONS

	mg/l	meg/l
Sodium, Na (calc)	3,986.59	173.33
Calcium, Ca	880.00	43.78
Magnesium, Mg	783.48	64.22
Barium, Ba	0.00	0.00
Iron, Fe	1.00	0.05

ANIONS

	mg/l	meg/l
Hydroxyl, OH		
Carbonate, CO ₃		
Bicarbonate, HCO ₃	1,220.00	19.97
Sulfate, SO ₄	1,100.00	22.54
Chloride, Cl	6,200.00	174.65
Sulfide, S	0.00	0.00

OTHER PROPERTIES

pH	7.00
Specific Gravity	1.000
Dissolved Oxygen, (mg/l)	
Dissolved Carbon Dioxide	52.80
Sulfide as H ₂ S, (ppm)	8.00
Sample Temp:	73°F. 23°C.

Total Dissolved Solids (mg/l)	14,171
Total Ionic Strength	0.3159
Maximum CaSO ₄ , (calc.)	1,564
Maximum BaSO ₄ , (calc.)	0
Total Hardness	5,400.00
	108.00

ESTIMATED MINERAL CONTENT AT SAMPLE TEMPERATURE

	meg/l	mg/l	lbs/kbbt
CaCO ₃	0.00	0.00	0.00
CaSO ₄	22.98	1,564.00	548.00
BaSO ₄	0.00	0.00	0.00

Note:

Since scale forming molecules can exist in solution, refer to the CaCO₃ saturation index for CaCO₃, or the solubilities for CaSO₄ and BaSO₄, and compare with the calculated amounts above to determine if precipitated scale may be possible.

Conclusion:

Calcium Carbonate scaling index is positive above 5 degrees Centigrade.
 Calcium Sulfate scale is not indicated from 0 to 100 degrees Centigrade.
 Barium Sulfate scale is not indicated from 0 to 100 degrees Centigrade.

Remarks:

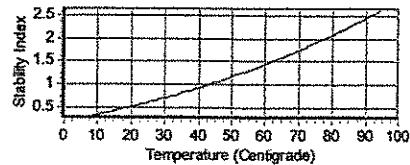
SAMPLE WATER IS BLACK.

Fahrenheit Degrees	32	85	122	167	212
(C X 1.8) + 32					
Centigrade Degrees	0	25	50	75	100

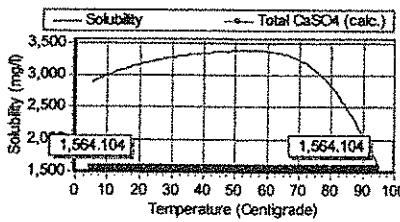
version 2.0

Scaling Indices vs. Temperature

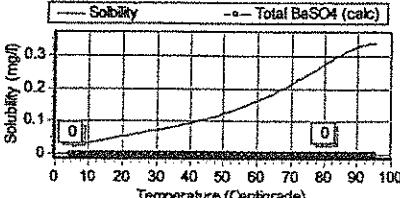
Calcium Carbonate Saturation Index



Calcium Sulfate Solubility



Barium Sulfate Solubility



Water Analysis Analysis #:9999

Company: PRIMA EXPLORATION
 Field: PRIMA EXPLORATION
 Lease: CBRRU THUNE LEASE
 Location: BUFFALO CO., SD
 Description: TREATER
 Well:
 Sample Point: BLEEDER



JACAM Chemicals, L. L. C.

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 P.O. Box 86
 STERLING, KS 67578
 Email: solutions@jcam.com

820-278-3355
 Fax 820-278-2112
 Web: www.jcam.com

Date: July 25, 2005

Attention: JESSE SMYLE

DISSOLVED SOLIDS

CATIONS	mg/l	meq/l
Sodium, Na (calc)	6,873.09	298.83
Calcium, Ca	960.00	47.76
Magnesium, Mg	442.13	36.24
Barium, Ba	0.00	0.00
Iron, Fe	0.00	0.00

ANIONS	mg/l	meq/l
Hydroxyl, OH		
Carbonate, CO ₃		
Bicarbonate, HCO ₃	366.00	5.99
Sulfate, SO ₄	1,500.00	30.74
Chloride, Cl	11,000.00	309.86
Sulfide, S	0.00	0.00

OTHER PROPERTIES

pH	7.00
Specific Gravity	1.010
Dissolved Oxygen, (mg/l)	
Dissolved Carbon Dioxide	35.20
Sulfide as H ₂ S, (ppm)	0.20
Sample Temp:	106F. 41C.

Total Dissolved Solids (mg/l)	21,141
Total Ionic Strength	0.4240
Maximum CaSO ₄ , (calc.)	2,137
Maximum BaSO ₄ , (calc.)	0
Total Hardness	4,200.00
	84.00

ESTIMATED MINERAL CONTENT AT SAMPLE TEMPERATURE

	meq/l	mg/l	lbs/kbbl
CaCO ₃	0.00	0.00	0.00
CaSO ₄	31.40	2,137.00	749.00
BaSO ₄	0.00	0.00	0.00

Note:
 Since scale forming molecules can exist in solution, refer to the CaCO₃ saturation index for CaCO₃, or the solubilities for CaSO₄ and BaSO₄, and compare with the calculated amounts above to determine if precipitated scale may be possible.

Conclusion:

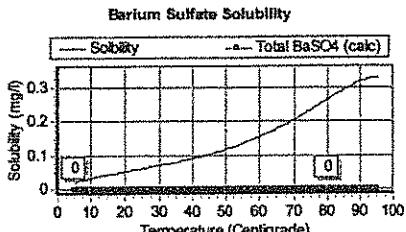
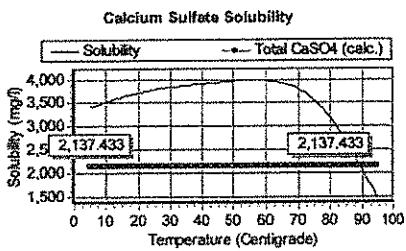
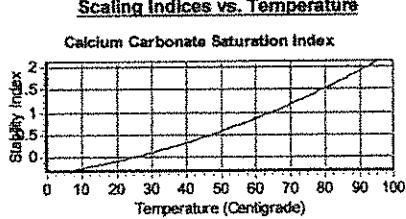
Calcium Carbonate scaling index is positive above 26 degrees Centigrade.
 Calcium Sulfate scale is indicated. See appropriate chart for temperature ranges.
 Barium Sulfate scale is not indicated from 0 to 100 degrees Centigrade.

Remarks:

SAMPLE WATER IS ORANGE.

Fahrenheit Degrees	32	85	122	167	212
(C X 1.8) + 32					
Centigrade Degrees	0	25	50	75	100

version 2.0



Water Analysis

Analysis #: 10006

Company: PRIMA EXPLORATION

Field: PRIMA EXPLORATION

Lease: CBRRU THUNE B

Location: BUFFALO CO., SD

Description: TREATER

Well:

Sample Point: BLEEDER



JACAM Chemicals, L. L. C.

205 S. Broadway P.O. Box 96 Fax 820-278-2112

STERLING, KS 67579 Web: www.jacm.com

Email: solutions@jacm.com

Date: July 25, 2005

Attention: JESSE SMYLE

DISSOLVED SOLIDS

CATIONS	mg/l	meg/l
Sodium, Na (calc)	7,535.03	327.61
Calcium, Ca	640.00	31.84
Magnesium, Mg	758.35	62.16
Barium, Ba	0.00	0.00
Iron, Fe	0.50	0.03

ANIONS	mg/l	meg/l
Hydroxyl, OH		
Carbonate, CO ₃		
Bicarbonate, HCO ₃	402.60	6.59
Sulfate, SO ₄	2,100.00	43.03
Chloride, Cl	11,000.00	309.86
Sulfide, S	0.00	0.00

OTHER PROPERTIES

pH	7.00
Specific Gravity	1.005
Dissolved Oxygen, (mg/l)	
Dissolved Carbon Dioxide	21.10
Sulfide as H ₂ S, (ppm)	4.00
Sample Temp:	109 F. 43C.

Total Dissolved Solids (mg/l)	22,436
Total Ionic Strength	0.4614
Maximum CaSO ₄ , (calc.)	2,187
Maximum BaSO ₄ , (calc.)	0
Total Hardness	4,700.00
	94.00

ESTIMATED MINERAL CONTENT AT SAMPLE TEMPERATURE

	mg/l	mg/l	lbs/kbbt
CaCO ₃	0.00	0.00	0.00
CaSO ₄	32.12	2,187.00	766.00
BaSO ₄	0.00	0.00	0.00

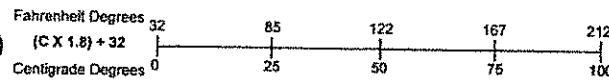
Note:

Since scale forming molecules can exist in solution, refer to the CaCO₃ saturation index for CaCO₃, or the solubilities for CaSO₄ and BaSO₄, and compare with the calculated amounts above to determine if precipitated scale may be possible.

Conclusion:

Calcium Carbonate scaling Index is positive above 34 degrees Centigrade.
Calcium Sulfate scale is indicated. See appropriate chart for temperature ranges.
Barium Sulfate scale is not indicated from 0 to 100 degrees Centigrade.

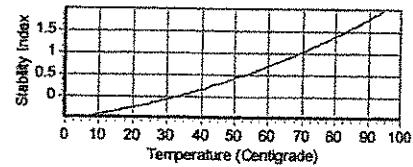
Remarks:



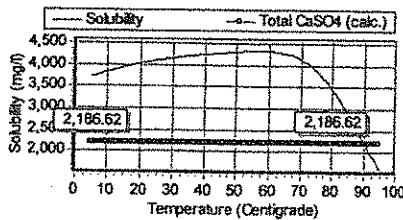
version 2.0

Scaling Indices vs. Temperature

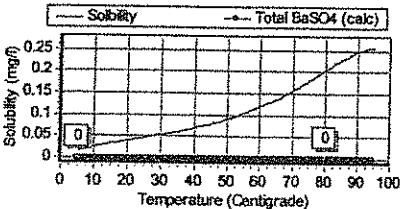
Calcium Carbonate Saturation Index



Calcium Sulfate Solubility



Barium Sulfate Solubility



Water Analysis

Analysis #: 10003

Company: PRIMA EXPLORATION

Field: PRIMA EXPLORATION

Lease: CBRRU THOMAS B

Location: BUFFALO CO., SD

Description: TREATER

Well:

Sample Point: BLEEDER



JACAM Chemicals, L. L. C.

205 S. Broadway

620-278-3355

P.O. Box 96

Fax 620-278-2112

STERLING, KS 67578

Web: www.jacam.com

Email: sales@jacam.com

Date: July 25, 2005

Attention: JESSE SMYLE

DISSOLVED SOLIDS

CATIONS	mg/l	meq/l
Sodium, Na (calc)	6,746.59	293.33
Calcium, Ca	600.00	29.85
Magnesium, Mg	831.43	68.15
Barium, Ba	0.00	0.00
Iron, Fe	10.00	0.54

ANIONS	mg/l	meq/l
Hydroxyl, OH		
Carbonate, CO ₃		
Bicarbonate, HCO ₃	439.20	7.19
Sulfate, SO ₄	1,700.00	34.84
Chloride, Cl	10,000.00	281.69
Sulfide, S	0.00	0.00

OTHER PROPERTIES

pH	7.00
Specific Gravity	1.005
Dissolved Oxygen, (mg/l)	
Dissolved Carbon Dioxide	26.40
Sulfide as H ₂ S, (ppm)	0.00
Sample Temp:	114F. 46C.

Total Dissolved Solids (mg/l)	20,327
Total Ionic Strength	0.4259
Maximum CaSO ₄ , (calc.)	2,049
Maximum BaSO ₄ , (calc.)	0
Total Hardness	4,900.00
	98.00

ESTIMATED MINERAL CONTENT AT SAMPLE TEMPERATURE

	meq/l	mg/l	lbs/kbbl
CaCO ₃	0.00	0.00	0.00
CaSO ₄	30.10	2,049.00	718.00
BaSO ₄	0.00	0.00	0.00

Note:

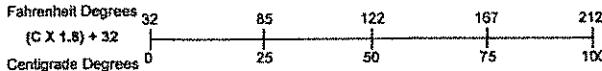
Since scale forming molecules can exist in solution, refer to the CaCO₃ saturation index for CaCO₃, or the solubilities for CaSO₄ and BaSO₄, and compare with the calculated amounts above to determine if precipitated scale may be possible.

Conclusion:

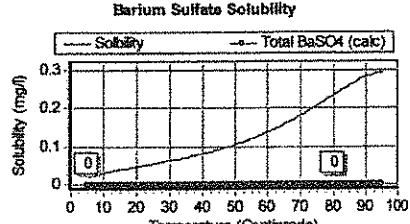
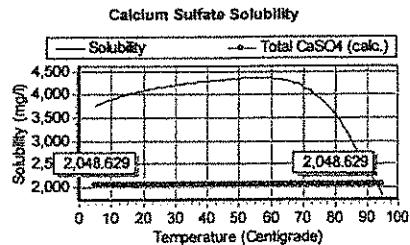
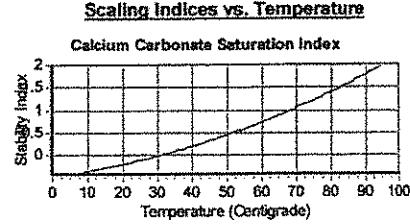
Calcium Carbonate scaling index is positive above 32 degrees Centigrade.
Calcium Sulfate scale is indicated. See appropriate chart for temperature ranges.
Barium Sulfate scale is not indicated from 0 to 100 degrees Centigrade.

Remarks:

SAMPLE WATER IS BLACK



version 2.0



Water Analysis

Analysis #10004

Company: PRIMA EXPLORATION
 Field: PRIMA EXPLORATION
 Lease: CBRRU 43-29 BROWN
 Location: BUFFALO CO., SD
 Description: TREATER
 Well:
 Sample Point: BLEEDER



JACAM Chemicals, L. L. C.

205 S. Broadway
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 Fax 820-278-2112
 Web: www.jacam.com

Date: July 25, 2005

Attention: JESSE SMYLE

DISSOLVED SOLIDS

CATIONS	mg/l	meq/l
Sodium, Na (calc)	6,512.91	283.17
Calcium, Ca	920.00	45.77
Magnesium, Mg	368.81	30.23
Barium, Ba	0.00	0.00
Iron, Fe	0.00	0.00

ANIONS	mg/l	meq/l
Hydroxyl, OH		
Carbonate, CO ₃		
Bicarbonate, HCO ₃	445.30	7.29
Sulfate, SO ₄	1,950.00	39.96
Chloride, Cl	10,000.00	281.69
Sulfide, S	0.00	0.00

OTHER PROPERTIES

pH	7.60
Specific Gravity	1.010
Dissolved Oxygen, (mg/l)	
Dissolved Carbon Dioxide	21.10
Sulfide as H ₂ S, (ppm)	15.00
Sample Temp:	136F. 58C.

Total Dissolved Solids (mg/l)	20,197
Total Ionic Strength	0.4041
Maximum CaSO ₄ , (calc.)	2,778
Maximum BaSO ₄ , (calc.)	0
Total Hardness	3,800.00
	76.00

ESTIMATED MINERAL CONTENT AT SAMPLE TEMPERATURE

	meq/l	mg/l	lbs/kbbl
CaCO ₃	0.00	0.00	0.00
CaSO ₄	40.81	2,778.00	973.00
BaSO ₄	0.00	0.00	0.00

Note:
 Since scale forming molecules can exist in solution, refer to the CaCO₃ saturation index for CaCO₃, or the solubilities for CaSO₄ and BaSO₄, and compare with the calculated amounts above to determine if precipitated scale may be possible.

Conclusion:

Calcium Carbonate scaling index is positive above 5 degrees Centigrade.
 Calcium Sulfate scale is indicated. See appropriate chart for temperature ranges.
 Barium Sulfate scale is not indicated from 0 to 100 degrees Centigrade.

Remarks:

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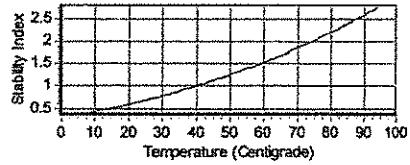
Fahrenheit Degrees	32	65	122	167	212
(C X 1.8) + 32					

Centigrade Degrees	0	25	50	75	100

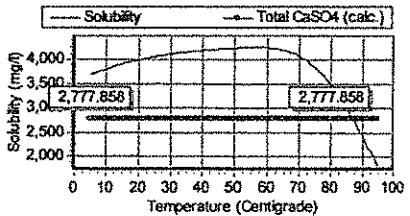
version 2.0

Scaling Indices vs. Temperature

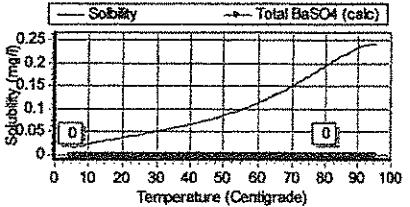
Calcium Carbonate Saturation Index



Calcium Sulfate Solubility



Barium Sulfate Solubility



Water Analysis Analysis #:10011

Company: PRIMA EXPLORATION

Field: PRIMA EXPLORATION

Lease: COMBINED #3

Location: BUFFALO CO., ND

Description:

Well:

Sample Point:



JACAM Chemicals, L. L. C.

205 S. Broadway
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STERLING, KS 67579

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Web: www.jacam.com
Email: solutions@jacam.com

Date: July 25, 2005

Attention: JESSE SMYLE

DISSOLVED SOLIDS

CATIONS	mg/l	meq/l
Sodium, Na (calc)	6,374.22	277.14
Calcium, Ca	782.20	38.92
Magnesium, Mg	688.28	56.42
Barium, Ba	0.45	0.01
Iron, Fe	69.43	3.73

ANIONS	mg/l	meq/l
Hydroxyl, OH		
Carbonate, CO ₃		
Bicarbonate, HCO ₃	571.27	9.35
Sulfate, SO ₄	1,709.75	35.04
Chloride, Cl	9,777.00	275.41
Sulfide, S	2.23	0.14

OTHER PROPERTIES

pH	7.04
Specific Gravity	1.007
Dissolved Oxygen, (mg/l)	
Dissolved Carbon Dioxide	30.92
Sulfide as H ₂ S, (ppm)	4.94
Sample Temp:	979°F. 40C.

Total Dissolved Solids (mg/l)	19,973
Total Ionic Strength	0.4133
Maximum CaSO ₄ , (calc.)	2,435
Maximum BaSO ₄ , (calc.)	1
Total Hardness	4,767.00
	95.34

ESTIMATED MINERAL CONTENT AT SAMPLE TEMPERATURE

	meq/l	mg/l	lbs/kbbl
CaCO ₃	0.00	0.00	0.00
CaSO ₄	35.78	2,435.00	853.00
BaSO ₄	0.01	1.00	0.00

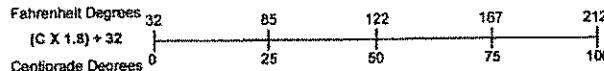
Note:
Since scale forming molecules can exist in solution, refer to the CaCO₃ saturation index for CaCO₃, or the solubilities for CaSO₄ and BaSO₄, and compare with the calculated amounts above to determine if precipitated scale may be possible.

Conclusion:

Calcium Carbonate scaling index is positive above 17 degrees Centigrade.
Calcium Sulfate scale is indicated. See appropriate chart for temperature ranges.
Barium Sulfate scale is indicated at all temperatures.

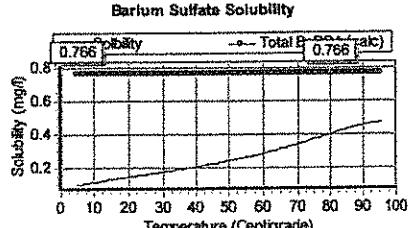
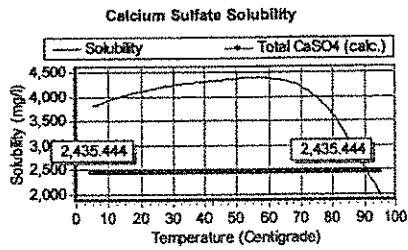
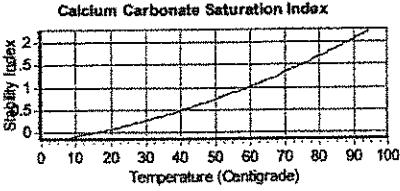
Remarks:

100% CBRU



version 2.0

Scaling Indices vs. Temperature



Water Analysis

Analysis #10013

Company: PRIMA EXPLORATION

Field: PRIMA EXPLORATION

Lease: COMBINED #5

Location: BUFFALO CO., SD

Description:

Well:

Sample Point:



JACAM Chemicals, L. L. C.

205 S. Broadway

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P.O. Box 86

Fax 820-278-2112

STERLING, KS 67579

Web: www.jacam.com

Email: solutions@jacam.com

Date: July 25, 2005

Attention: JESSE SMYLE

DISSOLVED SOLIDS

CATIONS	mg/l	meg/l
Sodium, Na (calc)	6,083.73	264.51
Calcium, Ca	800.84	39.84
Magnesium, Mg	709.41	58.15
Barium, Ba	0.34	0.00
Iron, Fe	52.27	2.81

ANIONS	mg/l	meg/l
Hydroxyl, OH		
Carbonate, CO ₃		
Bicarbonate, HCO ₃	699.31	11.45
Sulfate, SO ₄	1,617.80	33.15
Chloride, Cl	9,321.00	262.56
Sulfide, S	1.68	0.11

OTHER PROPERTIES

pH	7.03
Specific Gravity	1.006
Dissolved Oxygen, (mg/l)	
Dissolved Carbon Dioxide	35.35
Sulfide as H ₂ S, (ppm)	5.55
Sample Temp:	168F. 36C.

Total Dissolved Solids (mg/l)	19,285
Total Ionic Strength	0.4023
Maximum CaSO ₄ , (calc.)	2,304
Maximum BaSO ₄ , (calc.)	1
Total Hardness	4,899.50
	97.99

ESTIMATED MINERAL CONTENT AT SAMPLE TEMPERATURE

	meq/l	mg/l	lbs/kbbl
CaCO ₃	0.00	0.00	0.00
CaSO ₄	33.85	2,304.00	807.00
BaSO ₄	0.00	1.00	0.00

Note:

Since scale forming molecules can exist in solution, refer to the CaCO₃ saturation index for CaCO₃, or the solubilities for CaSO₄ and BaSO₄, and compare with the calculated amounts above to determine if precipitated scale may be possible.

Conclusion:

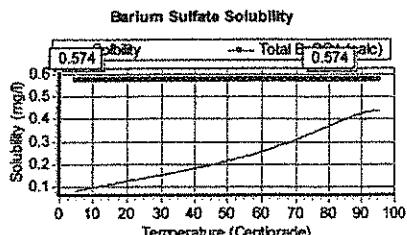
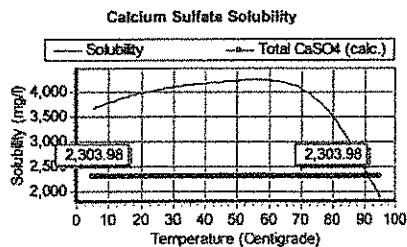
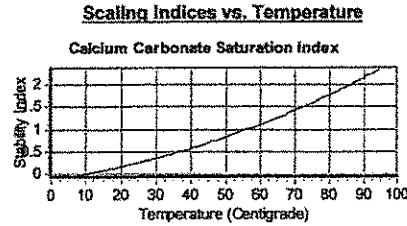
Calcium Carbonate scaling Index is positive above 10 degrees Centigrade.
Calcium Sulfate scale is indicated. See appropriate chart for temperature ranges.
Barium Sulfate scale is indicated at all temperatures.

Remarks:

75% CBRRU
5% TABLE MOUNTAIN
20% BRRU SWD

Fahrenheit Degrees	32	65	122	167	212
(C X 1.8) + 32					
Centigrade Degrees	0	25	50	75	100

version 2.0



**Central Buffalo Red River Unit
Reservoir Description**

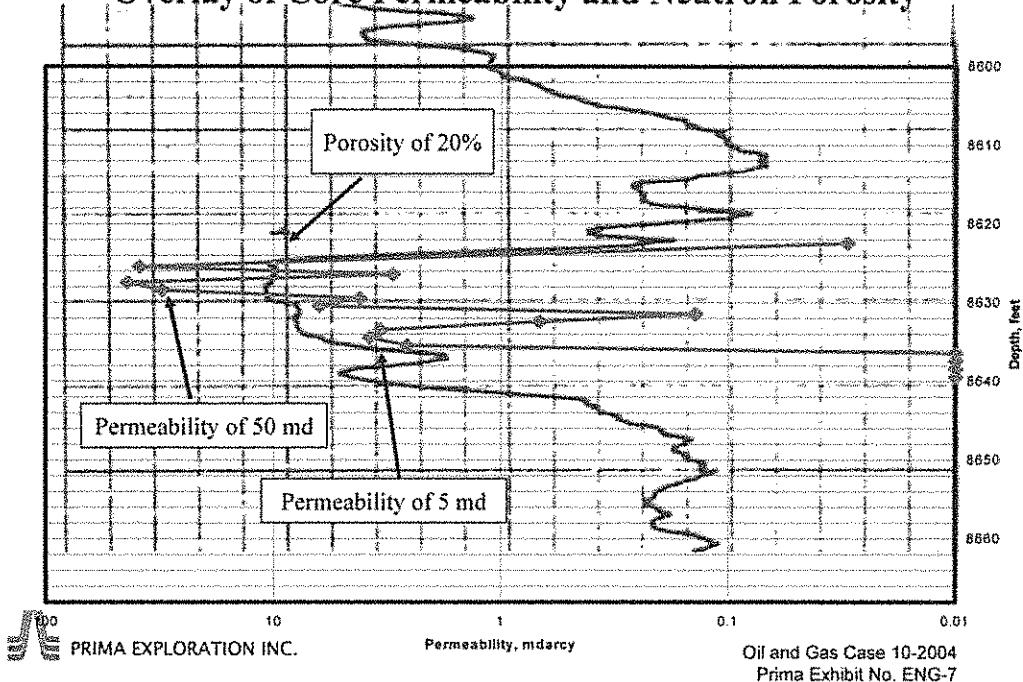
Location	Area (ac)	Thickness (ft)	Porosity (%)	Water Saturation (%)	Original Oil-In-Place (MSTB)	Well
S/2, Sec 28	320	14.1	19.3%	52.0%	2,809.1	Clarkson 14-28
S/2, Sec 29	320	11.6	19.1%	33.8%	3,027.1	Brown 43-29
E/2, Sec 30	320	11.7	19.9%	46.4%	2,272.7	Thune B 1-30
W/2, Sec 30	320	12.2	19.9%	52.4%	2,110.2	
E/2, Sec 31	320	14.2	19.7%	41.2%	3,123.1	Thune A-1
W/2, Sec 31	320	11.5	19.9%	46.1%	2,251.3	
All, Sec 32	640	14.4	19.3%	42.1%	6,384.6	Thomas B 1-R
W/2, Sec 33	320	13.6	19.2%	55.5%	2,378.5	
W/2, Sec 4	320	12.6	19.2%	40.0%	3,005.0	State 14-4
All, Sec 5	640	12.9	19.2%	33.6%	6,763.6	Thune 1, Thune 6-5
E/2, Sec 6	320	13.3	19.4%	42.4%	2,769.1	Series 8-6
W/2, Sec 6	320	13.9	19.9%	51.9%	2,309.9	
CBRUU Total	4,480				39,204.2	9 Wells



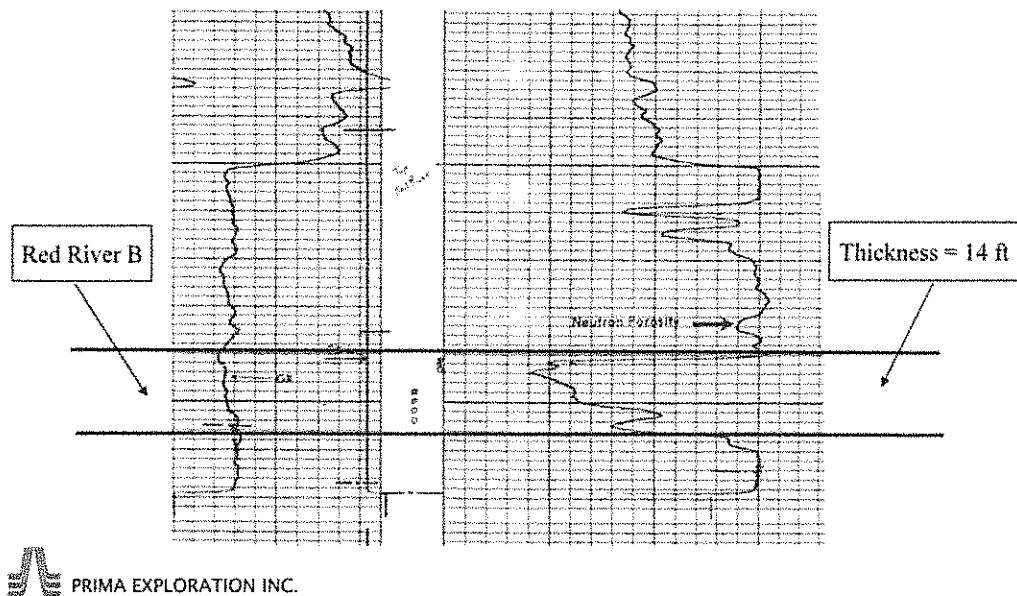
PRIMA EXPLORATION INC.

Thomas B #1

Overlay of Core Permeability and Neutron Porosity



Neutron Log From Thune #6-5



PRIMA EXPLORATION INC.

Mineral Owners

EXHIBIT "B"

SCHEDULE SHOWING THE PERCENTAGE AND KIND OF OWNERSHIP OF OIL AND GAS INTERESTS
 CENTRAL BUFFALO RED RIVER UNIT AREA
 HARDING COUNTY, SOUTH DAKOTA

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY		LESSEE OF RECORD AND PERCENTAGE		OVERRIDING ROYALTY AND PERCENTAGE		
				HBP	Marjorie Torpin (12.5% royalty)	PERCENTAGE	PERCENTAGE	PERCENTAGE	PERCENTAGE	
5. <u>T22N-R4E-B-HM</u> Sec. 31: Lots 1, 2, 3, 4, E/2W1/2		317.84			12.500000%	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunlikson Petroleum, Inc. TOTAL	34.70% 34.70% 25.00% 5.60% 100.0%	Blanche Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman	0.416667% 0.416667% 0.416667% 0.416666% 0.10417%	
						James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.10417% 0.10416% 0.10416% 0.10416% 2.50%			
					12.500000%	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunlikson Petroleum, Inc. TOTAL	34.70% 34.70% 25.00% 5.60% 100.0%	Blanche Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman	0.416667% 0.416667% 0.416667% 0.416666% 0.10417%	
					12.500000%	Betty J. Njoo (12.5% royalty)	James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.10417% 0.10417% 0.10416% 0.10416% 2.50%		
					12.500000%	HBP	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunlikson Petroleum, Inc. TOTAL	34.70% 34.70% 25.00% 5.60% 100.0%	Blanche Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman	0.416667% 0.416667% 0.416667% 0.416666% 0.10417%
					12.500000%	HBP	Judy K. McCann (12.5% royalty)	34.70% 34.70%	Blanche Marie Wilson Virginia Francis Pletcher	0.416667% 0.416667%
									8/31/2004 1667%	

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE		LESSEE OF RECORD AND PERCENTAGE	OVERRIDING ROYALTY AND PERCENTAGE
HBP	Gladys K. Kahrs (12.5% royalty)	12.50000%	Prima Exploration, Inc. Vegas Production Co.	34.70%	Blanche Marie Wilson Virginia Francis Pletcher	0.41667%	0.41667%
	Petroro Corporation Gunlikson Petroleum, Inc.	5.60%	Sandra K. Bolyard	0.41667%	Naylor Fred Forman	0.41667%	0.41667%
	TOTAL	100.0%	Vivian Forman	0.41666%	James E. Moats	0.10417%	0.10417%
			Donald R. Moats	0.10416%	Donald R. Moats	0.10417%	0.10416%
			Wanda Weese	0.10416%	Wanda Weese	0.10416%	0.10416%
			Marian Reed	0.10416%	Marian Reed	0.10416%	0.10416%
			TOTAL	2.50%			
HBP	Clara J. Flemmer (12.5% royalty)	12.50000%	Prima Exploration, Inc. Vegas Production Co.	34.70%	Blanche Marie Wilson Virginia Francis Pletcher	0.41667%	0.41667%
	Petroro Corporation Gunlikson Petroleum, Inc.	5.60%	Sandra K. Bolyard	0.41667%	Naylor Fred Forman	0.41667%	0.41667%
	TOTAL	100.0%	Vivian Forman	0.41666%	James E. Moats	0.10417%	0.10416%
			Donald R. Moats	0.10416%	Donald R. Moats	0.10417%	0.10416%
			Wanda Weese	0.10416%	Wanda Weese	0.10416%	0.10416%
			Marian Reed	0.10416%	Marian Reed	0.10416%	0.10416%
			TOTAL	2.50%			
HBP	Deborah Thomason (12.5% royalty)	3.12500%	Prima Exploration, Inc. Vegas Production Co.	34.70%	Blanche Marie Wilson Virginia Francis Pletcher	0.41667%	0.41667%
	Petroro Corporation Gunlikson Petroleum, Inc.	25.00%	Naylor Fred Forman	0.41667%	Naylor Fred Forman	0.41667%	0.41667%
	TOTAL	100.0%	Sandra K. Bolyard	0.41667%	Sandra K. Bolyard	0.41667%	0.41667%
			Vivian Forman	0.41666%	Vivian Forman	0.41666%	0.41666%
			James E. Moats	0.10417%	James E. Moats	0.10417%	0.10417%
			Donald R. Moats	0.10416%	Donald R. Moats	0.10417%	0.10416%
			Wanda Weese	0.10416%	Wanda Weese	0.10416%	0.10416%
			Marian Reed	0.10416%	Marian Reed	0.10416%	0.10416%
			TOTAL	2.50%			
HBP	Mildred Richardson (12.5% royalty)	3.12500%	Prima Exploration, Inc. Vegas Production Co.	34.70%	Blanche Marie Wilson Virginia Francis Pletcher	0.41667%	0.41667%

5. Continued

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD AND PERCENTAGE		OVERRIDING ROYALTY AND PERCENTAGE
					PETRO CORPORATION	GUNILKSON PETROLEUM, INC.	
HBP	Dennis W. Palczewski (12.5% royalty)	3.125000%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunilkson Petroleum, Inc. TOTAL	34.70% Blanche Marie Wilson 34.70% Virginia Francis Pletcher 25.00% Naylor Fred Forman 5.60% Sandra K. Bolyard 100.00% Vivian Forman	34.70% Blanche Marie Wilson 34.70% Virginia Francis Pletcher 25.00% Naylor Fred Forman 5.60% Sandra K. Bolyard 100.00% Vivian Forman	34.70% Blanche Marie Wilson 34.70% Virginia Francis Pletcher 25.00% Naylor Fred Forman 5.60% Sandra K. Bolyard 100.00% Vivian Forman	0.41667% 0.41667% 0.41667% 0.41667% 0.41667%
HBP	Dale R. Palczewski (12.5% royalty)	3.125000%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunilkson Petroleum, Inc. TOTAL	34.70% Blanche Marie Wilson 34.70% Virginia Francis Pletcher 25.00% Naylor Fred Forman 5.60% Sandra K. Bolyard 100.00% Vivian Forman	34.70% Blanche Marie Wilson 34.70% Virginia Francis Pletcher 25.00% Naylor Fred Forman 5.60% Sandra K. Bolyard 100.00% Vivian Forman	34.70% Blanche Marie Wilson 34.70% Virginia Francis Pletcher 25.00% Naylor Fred Forman 5.60% Sandra K. Bolyard 100.00% Vivian Forman	0.41667% 0.41667% 0.41667% 0.41667% 0.41667%
HBP	Timothy Glenn Brown (12.5% royalty)	4.166667%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunilkson Petroleum, Inc. TOTAL	34.70% Blanche Marie Wilson 34.70% Virginia Francis Pletcher 25.00% Naylor Fred Forman 5.60% Sandra K. Bolyard 100.00% Vivian Forman	34.70% Blanche Marie Wilson 34.70% Virginia Francis Pletcher 25.00% Naylor Fred Forman 5.60% Sandra K. Bolyard 100.00% Vivian Forman	34.70% Blanche Marie Wilson 34.70% Virginia Francis Pletcher 25.00% Naylor Fred Forman 5.60% Sandra K. Bolyard 100.00% Vivian Forman	0.41667% 0.41667% 0.41667% 0.41667% 0.41667%
HBP	Shariet Rene Teigen (12.5% royalty)	4.166667%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation	34.70% Blanche Marie Wilson 34.70% Virginia Francis Pletcher 25.00% Naylor Fred Forman	34.70% Blanche Marie Wilson 34.70% Virginia Francis Pletcher 25.00% Naylor Fred Forman	34.70% Blanche Marie Wilson 34.70% Virginia Francis Pletcher 25.00% Naylor Fred Forman	0.41667% 0.41667% 0.41667%

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD AND PERCENTAGE	OVERRIDING ROYALTY AND PERCENTAGE

HBP	Debra Kay Brown (12.5% royalty)	4.16667%	Prima Exploration, Inc. Vegas Production Co.	34.7000% 34.7000%	Blanche Marie Wilson Virginia Francis Plecher	0.41667% 0.41667%
	TOTAL	100.00%	Petroco Corporation	25.0000%	Naylor Fred Forman	0.41667%
			Gunlikson Petroleum, Inc.	5.6000%	Sandra K. Bolyard	0.41667%
			TOTAL	100.00%	Vivian Forman	0.41666%
					James E. Moats	0.10417%
					Donald R. Moats	0.10416%
					Wanda Weese	0.10416%
					Marian Reed	0.10416%
					TOTAL	2.50%

5. Continued

6.	<u>T22N-R4E-B-HM</u> Sec. 31; E12	320.00	HBP	Majorie Torpin (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunlikson Petroleum, Inc.	34.7000% 34.7000% 25.0000% 5.6000%	Blanche Marie Wilson Virginia Francis Plecher Naylor Fred Forman Sandra K. Bolyard	0.41667% 0.41667% 0.41667% 0.41667%
				TOTAL	100.00%	Vivian Forman	0.10417%		
						James E. Moats	0.10417%		
						Donald R. Moats	0.10417%		
						Wanda Weese	0.10416%		
						Marian Reed	0.10416%		
						TOTAL	2.50%		

HBP	Dorothy L. Thunem (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunlikson Petroleum, Inc.	34.7000% 34.7000% 25.0000% 5.6000%	Blanch Marie Wilson Virginia Francis Plecher Naylor Fred Forman Sandra K. Bolyard	0.41667% 0.41667% 0.41667% 0.41667%

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE (12.5% royalty)	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD AND PERCENTAGE	OVERRIDING ROYALTY AND PERCENTAGE
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6. Continued

HBP	Judy K. McCann (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petrolio Corporation	34.7000% 34.7000% 25.0000%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman	0.41667% 0.41667% 0.41667%
HBP	Gladys K. Kahrs (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petrolio Corporation	34.7000% 34.7000% 25.0000%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman	0.41667% 0.41667% 0.41667%
HBP	Clara J. Flemmer (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petrolio Corporation	34.7000% 34.7000% 25.0000%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman	0.41667% 0.41667% 0.41667%
HBP	Deborah Thomason	3.571429%	Prima Exploration, Inc.	34.7000%	Blanch Marie Wilson	0.10416% 2.50%

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE (12.5% royalty)	BASIC ROYALTY		LESSEE OF RECORD AND PERCENTAGE	OVERRIDING ROYALTY AND PERCENTAGE
				PERCENTAGE	AND PERCENTAGE		
6. Continued				Vegas Production Co.	34.7000%	Virginia Francis Pletcher	0.41667%
				Petroto Corporation	25.0000%	Naylor Fred Forman	0.41667%
				Gunklison Petroleum, Inc.	5.6000%	Sandra K. Bolyard	0.41667%
				TOTAL	100.00%	Vivian Forman	0.41666%
						James E. Moats	0.10417%
						Donald R. Moats	0.10417%
						Wanda Weese	0.10416%
						Marian Reed	0.10416%
				TOTAL	2.50%		
HBP	Mildred Richardson (12.5% royalty)	3.571429%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunklison Petroleum, Inc.	34.7000% 34.7000% 25.0000% 5.6000%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard	0.41667% 0.41667% 0.41667% 0.41666%	
				100.00%	Vivian Forman	0.41667%	
					James E. Moats	0.10417%	
					Donald R. Moats	0.10417%	
					Wanda Weese	0.10416%	
					Marian Reed	0.10416%	
					TOTAL	2.50%	
HBP	Dennis W. Palczewski (12.5% royalty)	3.571429%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunklison Petroleum, Inc.	34.7000% 34.7000% 25.0000% 5.6000%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard	0.41667% 0.41667% 0.41667% 0.41666%	
				100.00%	Vivian Forman	0.41667%	
					James E. Moats	0.10417%	
					Donald R. Moats	0.10417%	
					Wanda Weese	0.10416%	
					Marian Reed	0.10416%	
					TOTAL	2.50%	
HBP	Dale R. Palczewski (12.5% royalty)	3.571429%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunklison Petroleum, Inc.	34.7000% 34.7000% 25.0000% 5.6000%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard	0.41667% 0.41667% 0.41667% 0.41667%	
				100.00%	Vivian Forman	0.41666%	
					James E. Moats	0.10417%	
					Donald R. Moats	0.10417%	
					Wanda Weese	0.10416%	
					Marian Reed	0.10416%	
					TOTAL	2.50%	

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD AND PERCENTAGE	OVERRIDING ROYALTY AND PERCENTAGE		
				PERCENTAGE	PERCENTAGE	PERCENTAGE		
7. <u>T22N-R4E, B.H.M.</u> Sec. 32: W1/2NW1/4, SW1/4	240.00	HBP	Charles Yuill (12.5% royalty)	50.00%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Mariam Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10417% 0.10416% 2.50%
HBP	Hellerich & Payne, Inc. (12.5% royalty)	37.5000%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	None	None		
HBP	Gems, LTD (12.5% royalty)	4.16670%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	None	None		
HBP	Forest, LTD (12.5% royalty)	2.08330%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	None	None		
HBP	Stanley H. Singer Oil Company, LTD (12.5% royalty)	5.62500%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	None	None		
HBP	Flavian Oil Company (12.5% royalty)	0.62500%	Prima Exploration, Inc. Vegas Production Co.	34.7000% 34.7000%	None	8/31/2005		

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE		LESSEE OF RECORD AND PERCENTAGE		OVERRIDING ROYALTY AND PERCENTAGE	
				TOTAL	100.00%	PETRO CORPORATION	25.0000%	GUNNISON PETROLEUM, INC.	5.6000%
7a. <u>T22N-R4E, B.H.M.</u> Sec. 32; E2/NW/4		80.00	HBP	Majorie Torpin (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunnison Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Raed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10417% 0.10416% 0.10416% 2.50%
			HBP	Dorothy L. Thurnam (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunnison Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10417% 0.10416% 0.10416% 2.50%
			HBP	Betty J. Njops (12.5% royalty)	14.285714%				
			HBP	Judy K. McCann (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunnison Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10417% 0.10416% 0.10416% 2.50%

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE		LESSOR OF RECORD AND PERCENTAGE		OVERRIDING ROYALTY AND PERCENTAGE	
				PERCENTAGE	PERCENTAGE	PERCENTAGE	PERCENTAGE	PERCENTAGE	PERCENTAGE
7a. Continued									
	HBP	Gladys K. Kahrs (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.416667% 0.416667% 0.416667% 0.416667% 0.416667% 0.104177% 0.104163% 0.104163% 2.50%	0.416667% 0.416667% 0.416667% 0.416667% 0.416667% 0.104177% 0.104163% 0.104163% 0.104163%	
	HBP	Clara J. Flemmer (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.416667% 0.416667% 0.416667% 0.416667% 0.416667% 0.104177% 0.104163% 0.104163% 0.104163%	0.416667% 0.416667% 0.416667% 0.416667% 0.416667% 0.104177% 0.104163% 0.104163% 0.104163%	
	HBP	Deborah Thomasson (12.5% royalty)	3.571429%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.416667% 0.416667% 0.416667% 0.416667% 0.416667% 0.104177% 0.104177% 0.104177% 0.104163% 2.50%	0.416667% 0.416667% 0.416667% 0.416667% 0.416667% 0.104177% 0.104177% 0.104177% 0.104163% 2.50%	
	HBP	Mildred Richardson (12.5% royalty)	3.571429%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.416667% 0.416667% 0.416667% 0.416667% 0.416667% 0.104177% 0.104177% 0.104177% 0.104163% 2.50%	0.416667% 0.416667% 0.416667% 0.416667% 0.416667% 0.104177% 0.104177% 0.104177% 0.104163% 2.50%	

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD AND PERCENTAGE	OVERRIDING ROYALTY AND PERCENTAGE
				PERCENTAGE	PERCENTAGE	PERCENTAGE
7a. Continued						

8.	<u>T22N-R4E B.H.M. Sec. 32: SW1/4SE1/4</u>	40.00	HB/P	Charles Yull (12.5% royalty)	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunnilson Petroleum, Inc. TOTAL	34.7000% Blanch Marie Wilson 34.7000% Virginia Francis Pletcher 25.0000% Naylor Fred Forman 5.6000% Sandra K. Bolyard 100.00% Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10417% 0.10416% 0.10416%
					Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunnilson Petroleum, Inc. TOTAL	34.7000% Blanch Marie Wilson 34.7000% Virginia Francis Pletcher 25.0000% Naylor Fred Forman 5.6000% Sandra K. Bolyard 100.00% Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10417% 0.10416% 0.10416%
					Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunnilson Petroleum, Inc. TOTAL	34.7000% Blanch Marie Wilson 34.7000% Virginia Francis Pletcher 25.0000% Naylor Fred Forman 5.6000% Sandra K. Bolyard 100.00% Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10417% 0.10416% 0.10416%
					Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunnilson Petroleum, Inc. TOTAL	34.7000% Blanch Marie Wilson 34.7000% Virginia Francis Pletcher 25.0000% Naylor Fred Forman 5.6000% Sandra K. Bolyard 100.00% Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10417% 0.10416% 0.10416%

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD AND PERCENTAGE		OVERRIDING ROYALTY AND PERCENTAGE
					(12.5% royalty)		

HBP	Prince Minerals II, Ltd. (12.5% royalty)	9.37500%	Prima Exploration, Inc. Vegas Production Co.	34.7000% 34.7000%	Vegas Production Co. Petroco Corporation Gunilsson Petroleum, Inc. TOTAL	34.7000% 25.0000% 5.6000% 100.00%	None
HBP	Prince Minerals II, Ltd. TOTAL	3.12500%	Prima Exploration, Inc. Vegas Production Co.	34.7000% 34.7000%	Prima Exploration, Inc. Vegas Production Co.	34.7000% 25.0000% 5.6000% 100.00%	None
8a.	<u>T22N-R4E, B.H.M.</u> Sec. 32; SE/4SE/4	40.00	J. Clarkson Oil, Inc. (16.667% royalty)	100.00%	Prima Exploration, Inc. Vegas Production Co.	34.7000% 34.7000%	None
					Petroco Corporation Gunilsson Petroleum, Inc. TOTAL	25.0000% 5.6000% 100.00%	

8b.	<u>T22N-R4E, B.H.M.</u> Sec. 32; NW/4SE/4, SW/4NE/4	80.00	HBP (12.5% royalty)	12.5000%	Prima Exploration, Inc. Vegas Production Co.	34.7000% 34.7000%	Blanch Marie Wilson Virginia Francis Pletcher
					Petroco Corporation Gunilsson Petroleum, Inc. TOTAL	25.0000% 5.6000% 100.00%	0.41667% 0.41667% 0.41667%
					James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.10417% 0.10417% 0.10416% 0.10416%	
						2.50%	

HBP	Dorothy L. Thunem (12.5% royalty)	12.5000%	Prima Exploration, Inc. Vegas Production Co.	34.7000% 34.7000%	Blanch Marie Wilson Virginia Francis Pletcher	0.41667% 0.41667%
			Petroco Corporation Gunilsson Petroleum, Inc.	25.0000% 5.6000%	Naylor Fred Forman Sandra K. Bolyard	0.41667%

8b. Continued

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY		LESSEE OF RECORD AND PERCENTAGE	OVERRIDING ROYALTY AND PERCENTAGE	
				PERCENTAGE	TOTAL			
HBP	Betty J. Njops (12.5% royalty)	12.5000%	Judy K. McCann (12.5% royalty)	12.5000%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunnilson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41666% 0.10417% 0.10417% 0.10416% 0.10416%
HBP	Gladys K. Kahrs (12.5% royalty)	12.5000%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunnilson Petroleum, Inc. TOTAL	12.5000%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunnilson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41666% 0.10417% 0.10417% 0.10416% 0.10416%
HBP	Clara J. Flemmer (12.5% royalty)	12.5000%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunnilson Petroleum, Inc. TOTAL	12.5000%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunnilson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41666% 0.10417% 0.10417% 0.10416% 0.10416%

8b. Continued

Central Buffalo Red River Unit Area	12
HBP	Clara J. Flemmer (12.5% royalty)

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE		LESSEE OF RECORD AND PERCENTAGE	OVERRIDING ROYALTY AND PERCENTAGE
				PERCENTAGE	PERCENTAGE		
HBP	Timothy Glenn Brown (12.5% royalty)	4.166700%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation TOTAL	34.7000% 34.7000% 25.0000%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10416% 0.10416%	0.10416% 2.50%
HBP	Shariet Rene Tigen (12.5% royalty)	4.166700%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10416% 0.10416%	0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10416% 0.10416%
HBP	Debra Kay Brown (12.5% royalty)	4.166700%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10416% 0.10416%	0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10416% 0.10416%
HBP	Deborah Thomason (12.5% royalty)	3.125000%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10416% 0.10416%	0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10416% 0.10416%

8b. Continued

HBP	Deborah Thomason (12.5% royalty)	3.125000%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10416% 0.10416%	0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10416% 0.10416%

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE		LESSEE OF RECORD AND PERCENTAGE	OVERRIDING ROYALTY AND PERCENTAGE
				PERCENTAGE	PERCENTAGE		
HB-P	Mildred Richardson (12.5% royalty)	3.125000%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation TOTAL	34.7000% 34.7000% 25.0000%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10417% 0.10416% 0.10416%	0.10416% 2.50%
HB-P	Dennis W. Palczewski (12.5% royalty)	3.125000%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10417% 0.10416% 0.10416%	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10416% 0.10416% 0.10416% 0.10416%
HB-P	Dale R. Palczewski (12.5% royalty)	3.125000%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10417% 0.10416% 0.10416%	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10416% 0.10416% 0.10416% 0.10416%
8c.	<u>T22N-R4E, S. H.M.</u> Sec. 32, NE4/SE4, SE4/NE4, N/2NE4	160.00	1-31-2005 Majorie Torpin (14.0% royalty)	12.50000%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	0.10417% 0.10417% 0.10416% 0.10416% 0.10416%

8b. Continued

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TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE		LESSEE OF RECORD AND PERCENTAGE	OVERRIDING ROYALTY AND PERCENTAGE	
2-1-2005	Dorothy L. Thunem (14.0% royalty)	12.5000%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000%	34.7000%	None	25.0000%	5.6000%
1-27-2005	Betty J. Njos (16.667% royalty)	12.5000%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000%	34.7000%	None	25.0000%	5.6000%
1-27-2005	Judy K. McCann (16.667% royalty)	12.5000%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000%	34.7000%	None	25.0000%	5.6000%
1-31-2005	Gladys K. Kahrs (14.0% royalty)	12.5000%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000%	34.7000%	None	25.0000%	5.6000%
1-31-2005	Clara J. Fiemmer (14.0% royalty)	12.5000%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000%	34.7000%	None	25.0000%	5.6000%
3-23-2005	Timothy Glenn Brown (14.0% royalty)	4.166700%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000%	34.7000%	None	25.0000%	5.6000%
1-31-2005	Sharlet Rene Teigen (14.0% royalty)	4.166700%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000%	34.7000%	None	25.0000%	5.6000%
1-31-2005	Debra Kay Brown (14.0% royalty)	4.166700%	Prima Exploration, Inc. Vegas Production Co. Petro Corporation Gunlikson Petroleum, Inc.	34.7000%	34.7000%	None	25.0000%	5.6000%

8c. Continued

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD AND PERCENTAGE	OVERRIDING ROYALTY AND PERCENTAGE	
1-31-2005 (14.0% royalty)	Deborah Thomason	3.125000%	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunlikson Petroleum, Inc. TOTAL	34.70000% 34.70000% 25.00000% 5.60000% 100.00%	None	34.70000% 34.70000% 25.00000% 5.60000% 100.00%	
1-31-2005 (14.0% royalty)	Dennis W. Palczewski	3.125000%	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunlikson Petroleum, Inc. TOTAL	34.70000% 34.70000% 25.00000% 5.60000% 100.00%	None	34.70000% 34.70000% 25.00000% 5.60000% 100.00%	
1-31-2005 (14.0% royalty)	Dale R. Palczewski	3.125000%	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunlikson Petroleum, Inc. TOTAL	34.70000% 34.70000% 25.00000% 5.60000% 100.00%	None	34.70000% 34.70000% 25.00000% 5.60000% 100.00%	
11. <u>T21N-R4E, B.H.M.</u> Sec. 5; Lot 2, S/2NE1/4	HBP	119.94	Marijorie Torpin (12.5% royalty)	14.285714% Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunlikson Petroleum, Inc. TOTAL	34.70000% 34.70000% 25.00000% 5.60000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10417% 0.10417% 0.10417%
HBP	Dorothy L. Thunem (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunlikson Petroleum, Inc. TOTAL	34.70000% 34.70000% 25.00000% 5.60000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10417% 0.10417%	

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD AND PERCENTAGE	OVERRIDING ROYALTY AND PERCENTAGE
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11. Continued						
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HB/P	Betty J. Nios (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard	Marian Reed TOTAL	0.416667% 0.416667% 0.416667% 0.416667%
HB/P	Judy K. McCann (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard	Marian Reed TOTAL	0.416667% 0.416667% 0.416667% 0.416667%
HB/P	Gladys K. Kahrs (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard	Marian Reed TOTAL	0.416667% 0.416667% 0.416667% 0.416667%
HB/P	Clara J. Flemmar (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard	Marian Reed TOTAL	0.416667% 0.416667% 0.416667% 0.416667%

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY
				AND PERCENTAGE	Marian Reed	AND PERCENTAGE
11. Continued					Marian Reed TOTAL	0.10416% 2.50%

HBP	Deborah Thomason (12.5% royalty)	3.571429%	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41668% 0.10417% 0.10416% 0.10416% 2.50%
HBP	Mildred Richardson (12.5% royalty)	3.571429%	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41666% 0.10417% 0.10417% 0.10416% 0.10416% 2.50%
HBP	Dennis W. Palczewski (12.5% royalty)	3.571429%	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41666% 0.10417% 0.10417% 0.10416% 0.10416% 2.50%
HBP	Dale R. Palczewski (12.5% royalty)	3.571429%	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41666% 0.10417% 0.10417% 0.10416% 0.10416% 2.50%

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD AND PERCENTAGE	OVERRIDING ROYALTY AND PERCENTAGE
				PERCENTAGE	Wanda Weese	0.10416%

11. Continued

11a. <u>T21N-R4E, B.H.M.</u> Sec. 5; Lot 1	39.95	HBP	J. Clarkson Oil, Inc. (12.5% royalty)	100.00% Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Marian Reed TOTAL	0.10416% 2.50%
12. <u>T21N-R4E, B.H.M.</u> Sec. 5; Lots 3, 4, SE1/4NW1/4	119.83	HBP	Marjorie Torpin (12.5% royalty)	14.285714% Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10417% 0.10416% 2.50%
HBP	Dorothy L. Thunem (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41666% 0.10417% 0.10417% 0.10416% 2.50%	
HBP	Betty J. Njos (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41666% 0.10417% 0.10417%	

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE
					PERCENTAGE	PERCENTAGE
12. Continued						
HBP	Judy K. McCann (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunlikson Petroleum, Inc. TOTAL	34.70000% 34.70000% 25.00000% 5.60000% 100.000%	Blanch Marie Wilson Virginia Francis Fletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10416% 0.10416% 0.10416% 2.50%
HBP	Gladys K. Kahrs (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunlikson Petroleum, Inc. TOTAL	34.70000% 34.70000% 25.00000% 5.60000% 100.000%	Blanch Marie Wilson Virginia Francis Fletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10416% 0.10416% 0.10416% 2.50%
HBP	Clara J. Flemmer (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunlikson Petroleum, Inc. TOTAL	34.70000% 34.70000% 25.00000% 5.60000% 100.000%	Blanch Marie Wilson Virginia Francis Fletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10416% 0.10416% 0.10416% 2.50%
HBP	Deborah Thomason	3.251429%	Prima Exploration, Inc.	34.70000%	Blanch Marie Wilson	8/31/2005 1667%

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD AND PERCENTAGE	OVERRIDING ROYALTY AND PERCENTAGE	
						(12.5% royalty)	(12.5% royalty)
				Vegas Production Co.	34.7000%	Virginia Francis Pletcher	0.41667%
				Petroto Corporation	25.0000%	Naylor Fred Forman	0.41667%
				Gunlikson Petroleum, Inc.	5.6000%	Sandra K. Bolyard	0.41667%
				TOTAL	100.00%	Vivian Forman	0.41666%
						James E. Moats	0.10417%
						Donald R. Moats	0.10417%
						Wanda Weese	0.10416%
						Marian Reed	0.10416%
				TOTAL	2.50%		
HBP	Mildred Richardson (12.5% royalty)	3.571429%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunlikson Petroleum, Inc.	34.7000% 34.7000% 25.0000% 5.6000%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard	0.41667% 0.41667% 0.41667% 0.41666%	
				TOTAL		James E. Moats	0.10417%
						Donald R. Moats	0.10417%
						Wanda Weese	0.10416%
						Marian Reed	0.10416%
				TOTAL	2.50%		
HBP	Dennis W. Palczewski (12.5% royalty)	3.571429%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunlikson Petroleum, Inc.	34.7000% 34.7000% 25.0000% 5.6000%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard	0.41667% 0.41667% 0.41667% 0.41666%	
				TOTAL		Vivian Forman	0.10417%
						James E. Moats	0.10417%
						Donald R. Moats	0.10416%
						Wanda Weese	0.10416%
						Marian Reed	0.10416%
				TOTAL	2.50%		
HBP	Date R. Palczewski (12.5% royalty)	3.571429%	Prima Exploration, Inc. Vegas Production Co. Petroto Corporation Gunlikson Petroleum, Inc.	34.7000% 34.7000% 25.0000% 5.6000%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard	0.41667% 0.41667% 0.41667% 0.41667%	
				TOTAL		Vivian Forman	0.41666%
						James E. Moats	0.10417%
						Donald R. Moats	0.10417%
						Wanda Weese	0.10416%
				TOTAL	2.50%		
						Marian Reed	0.10416%
						TOTAL	2.50%

12. Continued

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD AND PERCENTAGE	OVERRIDING ROYALTY AND PERCENTAGE	
						PERCENTAGE	PERCENTAGE
12a. <u>T21N-R4E, B.H.M.</u> Sec. 5: SW1/4NW1/4		40.00	Effective 4-1-1973	SD-24299 U.S.A.-All (12.5% royalty)	100.00%	Prima Exploration, Inc. Vegas Production Co. Petrocor Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% Henry Y. Yoshino Estate 34.7000% Joseph K. Yoshino, Trustee 25.0000% 5.6000% 100.00%
HBP							
13. <u>T21N-R4E, B.H.M.</u> Sec. 5: SE1/4		160.00	HBP	Madorie Torpin (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petrocor Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% Blanch Marie Wilson 34.7000% Virginia Francis Pletcher 25.0000% Naylor Fred Forman 5.6000% Sandra K. Bolyard 100.00% Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL
HBP	Dorothy L. Thunem (12.5% royalty)				14.285714%	Prima Exploration, Inc. Vegas Production Co. Petrocor Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% Blanch Marie Wilson 34.7000% Virginia Francis Pletcher 25.0000% Naylor Fred Forman 5.6000% Sandra K. Bolyard 100.00% Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL
HBP	Betty J. Njoes (12.5% royalty)				14.285714%	Prima Exploration, Inc. Vegas Production Co. Petrocor Corporation Gunlikson Petroleum, Inc. TOTAL	34.7000% Blanch Marie Wilson 34.7000% Virginia Francis Pletcher 25.0000% Naylor Fred Forman 5.6000% Sandra K. Bolyard 100.00% Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL
HBP	Judy K. McCann (12.5% royalty)	22			14.285714%	Prima Exploration, Inc. Vegas Production Co. Petrocor Corporation	34.7000% Blanch Marie Wilson 34.7000% Virginia Francis Pletcher 25.0000% Naylor Fred Forman
						Wanda Weese Marian Reed TOTAL	0.10416% 0.10416% 2.50%
13. Continued							
Central Buffalo Red River Unit Area							

TRACT NO.	DESCRIPTION OF LAND	NUMBER ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD AND PERCENTAGE	OVERRIDING ROYALTY AND PERCENTAGE
				GUNNISON PETROLEUM, INC.	5.6000%	SANDRA K. BOYARD
HB-P	Gladys K. Kahrs (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunnison Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10416% 0.10416% 2.50%
HB-P	Clara J. Flemmer (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunnison Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41667% 0.10417% 0.10417% 0.10416% 0.10416% 2.50%
HB-P	Deborah Thomason (12.5% royalty)	3.571429%	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunnison Petroleum, Inc. TOTAL	34.7000% 34.7000% 25.0000% 5.6000% 100.00%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.41667% 0.41667% 0.41667% 0.41667% 0.41666%
HB-P	Mildred Richardson (12.5% royalty)	3.571429%	Prima Exploration, Inc. Vegas Production Co. Petroco Corporation Gunnison Petroleum, Inc.	34.7000% 34.7000% 25.0000% 5.6000%	Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard	0.41667% 0.41667% 0.41667% 0.41666%

13. Continued

TRACT NO.	DESCRIPTION OF LAND	NUMBER ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY		LESSEE OF RECORD AND PERCENTAGE		OVERRIDING ROYALTY AND PERCENTAGE	
					PERCENTAGE	TOTAL	100.00%	Vivian Forman	0.41666%
HBP	Dennis W. Palczewski (12.5% royalty)	3.571429%		Prima Exploration, Inc. Vegas Production Co.	34.7000%	Blanch Marie Wilson Virginia Francis Pletcher	0.416667%	James E. Moats	0.10417%
				Petrooro Corporation	25.0000%	Naylor Fred Forman	0.416667%	Donald R. Moats	0.10417%
				Gunlikson Petroleum, Inc.	5.6000%	Sandra K. Bolyard	0.416667%	Wanda Weese	0.10416%
				TOTAL	100.00%	Vivian Forman	0.416666%	Marian Reed	0.10416%
						James E. Moats	0.10417%	TOTAL	2.50%
HBP	Dale R. Palczewski (12.5% royalty)	3.571429%		Prima Exploration, Inc. Vegas Production Co.	34.7000%	Blanch Marie Wilson Virginia Francis Pletcher	0.416667%	James E. Moats	0.10417%
		100.00%		Petrooro Corporation	25.0000%	Naylor Fred Forman	0.416667%	Donald R. Moats	0.10417%
				Gunlikson Petroleum, Inc.	5.6000%	Sandra K. Bolyard	0.416667%	Wanda Weese	0.10416%
				TOTAL	100.00%	Vivian Forman	0.416666%	Marian Reed	0.10416%
						James E. Moats	0.10417%	TOTAL	2.50%
HBP	Dorothy L. Thunen (12.5% royalty)	14.285714%		Prima Exploration, Inc. Vegas Production Co.	34.7000%	Blanch Marie Wilson Virginia Francis Pletcher	0.416667%	James E. Moats	0.416667%
		24		Petrooro Corporation	25.0000%	Naylor Fred Forman	0.416667%	Donald R. Moats	0.416667%
				Gunlikson Petroleum, Inc.	5.6000%	Sandra K. Bolyard	0.416667%	Wanda Weese	0.416667%
				TOTAL	100.00%	Vivian Forman	0.416666%	Marian Reed	0.416666%
						James E. Moats	0.10417%	TOTAL	2.50%
						Donald R. Moats	0.10417%		
						Wanda Weese	0.10416%		
						Marian Reed	0.10416%		
						TOTAL	0.10416%		
							2.50%		

TRACT NO.	DESCRIPTION OF LAND	NUMBER ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY		LESSEE OF RECORD AND PERCENTAGE		OVERRIDING ROYALTY AND PERCENTAGE	
				PERCENTAGE	PERCENTAGE	PERCENTAGE	PERCENTAGE	PERCENTAGE	PERCENTAGE
				Petroto Corporation	25.0000%	Naylor Fred Forman	0.41667%		
				Gunlikson Petroleum, Inc.	5.6000%	Sandra K. Bolyard	0.41667%		
				TOTAL	100.00%	Vivian Forman	0.41666%		
						James E. Moats	0.10417%		
						Donald R. Moats	0.10416%		
						Wanda Weese	0.10416%		
						Marian Reed	0.10416%		
						TOTAL	2.50%		
HB-P	Betty J. Njos (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co.	34.7000%	Blanch Marie Wilson	0.41667%			
			Petroto Corporation	34.7000%	Virginia Francis Pletcher	0.41667%			
			Gunlikson Petroleum, Inc.	25.0000%	Naylor Fred Forman	0.41667%			
			TOTAL	5.6000%	Sandra K. Bolyard	0.41667%			
				100.00%	Vivian Forman	0.41666%			
					James E. Moats	0.10417%			
					Donald R. Moats	0.10417%			
					Wanda Weese	0.10416%			
					Marian Reed	0.10416%			
					TOTAL	2.50%			
HB-P	Judy K. McCann (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co.	34.7000%	Blanch Marie Wilson	0.41667%			
			Petroto Corporation	34.7000%	Virginia Francis Pletcher	0.41667%			
			Gunlikson Petroleum, Inc.	25.0000%	Naylor Fred Forman	0.41667%			
			TOTAL	5.6000%	Sandra K. Bolyard	0.41667%			
				100.00%	Vivian Forman	0.41666%			
					James E. Moats	0.10417%			
					Donald R. Moats	0.10417%			
					Wanda Weese	0.10416%			
					Marian Reed	0.10416%			
					TOTAL	2.50%			
HB-P	Clara J. Flemmer (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co.	34.7000%	Blanch Marie Wilson	0.41667%			
		25		34.7000%	Virginia Francis Pletcher	0.41667%			

14. Continued

					Marian Reed	0.10416%			
					TOTAL	2.50%			
HB-P	Glady K. Kahr's (12.5% royalty)	14.285714%	Prima Exploration, Inc. Vegas Production Co.	34.7000%	Blanch Marie Wilson	0.41667%			
			Petroto Corporation	34.7000%	Virginia Francis Pletcher	0.41667%			
			Gunlikson Petroleum, Inc.	25.0000%	Naylor Fred Forman	0.41667%			
			TOTAL	5.6000%	Sandra K. Bolyard	0.41667%			
				100.00%	Vivian Forman	0.41666%			
					James E. Moats	0.10417%			
					Donald R. Moats	0.10417%			
					Wanda Weese	0.10416%			
					Marian Reed	0.10416%			
					TOTAL	2.50%			

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER & EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD AND PERCENTAGE	OVERRIDING ROYALTY AND PERCENTAGE
HBP	Deborah Thomason (12.5% royalty)	3.571429%	Prima Exploration, Inc. Vegas Production Co.	34.7000% Blanch Marie Wilson 25.0000% Virginia Francis Pletcher 5.6000% Naylor Fred Forman 100.00% Sandra K. Bolyard	0.41667% Naylor Fred Forman 0.41667% Sandra K. Bolyard 0.41667% Vivian Forman 0.10417% James E. Moats 0.10417% Donald R. Moats 0.10416% Wanda Weese 0.10416% Marian Reed	0.41667% 0.41667% 0.41667% 0.10417% 0.10417% 0.10416% 2.50%
HBP	Mildred Richardson (12.5% royalty)	3.571429%	Prima Exploration, Inc. Vegas Production Co.	34.7000% Blanch Marie Wilson 25.0000% Virginia Francis Pletcher 5.6000% Naylor Fred Forman 100.00% Sandra K. Bolyard	0.41667% Naylor Fred Forman 0.41667% Sandra K. Bolyard 0.41667% Vivian Forman 0.10417% James E. Moats 0.10417% Donald R. Moats 0.10416% Wanda Weese 0.10416% Marian Reed	0.41667% 0.41667% 0.41667% 0.10417% 0.10417% 0.10416% 2.50%
HBP	Dennis W. Palczewski (12.5% royalty)	3.571429%	Prima Exploration, Inc. Vegas Production Co.	34.7000% Blanch Marie Wilson 25.0000% Virginia Francis Pletcher 5.6000% Sandra K. Bolyard 100.00% Vivian Forman	0.41667% Naylor Fred Forman 0.41667% Sandra K. Bolyard 0.41667% Vivian Forman 0.10417% James E. Moats 0.10417% Donald R. Moats 0.10416% Wanda Weese 0.10416% Marian Reed	0.41667% 0.41667% 0.41667% 0.10417% 0.10417% 0.10416% 2.50%
HBP	Dale R. Palczewski (12.5% royalty)	3.571429% 26	Prima Exploration, Inc. Vegas Production Co.	34.7000% Blanch Marie Wilson 34.7000% Virginia Francis Pletcher	0.41667% 0.41667% 0.41667% 0.41667%	0.41667% 0.41667%

14. Continued

James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.10417% 0.10416% 0.10416% 0.10416% 2.50%
Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman	0.41667% 0.41667% 0.41667% 0.41667% 0.41667%
James E. Moats Donald R. Moats Wanda Weese Marian Reed TOTAL	0.10417% 0.10417% 0.10416% 0.10416% 2.50%
Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman	0.41667% 0.41667% 0.41667% 0.41667% 0.41667%
Blanch Marie Wilson Virginia Francis Pletcher Naylor Fred Forman Sandra K. Bolyard Vivian Forman	0.41667% 0.41667% 0.41667% 0.41667% 0.41667%

TRACT NO.	DESCRIPTION OF LAND	ACRES	DATE OF LEASE	TOTAL	PERCENTAGE	BASIC ROYALTY		LESSEE OF RECORD AND PERCENTAGE		OVERRIDING ROYALTY AND PERCENTAGE		
						NUMBER	SERIAL NUMBER & EXPIRATION DATE	AND PERCENTAGE	PERCENTAGE	AND PERCENTAGE	PERCENTAGE	
15. <u>T21N-R4E, B.H.M.</u> Sec. 6; Lots 1, 2, S/2NE1/4, SE1/4	319.85	HBP	Church of the Covenant (12.5% royalty)	100.00%	Petrolium Corporation, Gunlikson Petroleum, Inc.	25.0000%	Naylor Fred Forman	0.416667%	Petrolium Corporation, Gunlikson Petroleum, Inc.	5.6000%	Sandra K. Bolyard	0.416667%
					TOTAL	100.00%	Vivian Forman	0.416666%	JAMES E. MOATS	0.10417%	DONALD R. MOATS	0.10417%
							Wanda Weese	0.10416%	MARIA REED	0.10416%	TOTAL	2.50%
16. <u>T21N-R4E, B.H.M.</u> Sec. 6; Lots 3, 4, 5, 6, 7, SE1/4NW1/4, E1/2SW1/4	316.75	Not Yet Issued State of South Dakota (12.5% royalty)	100.00%	Prima Exploration, Inc.	100.00%	Blanch Marie Wilson Vegas Production Co.	34.7000%	Virginia Francis Fletcher	0.416667%	James E. Moats	0.10417%	
						25.0000%	Naylor Fred Forman	0.416667%	Donald R. Moats	0.10417%	Wanda Weese	0.10416%
						5.6000%	Sandra K. Bolyard	0.416667%	Maria Reed	0.10416%	TOTAL	2.50%



DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES
Minerals & Mining Program - Oil & Gas Section
2050 West Main, Suite #1, Rapid City, SD 57702-2493
Telephone: 605-394-2229, FAX: 605-394-5317

FORM 13

STATE OF SOUTH DAKOTA
BEFORE THE SECRETARY OF
THE DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

IN THE MATTER OF THE
APPLICATION OF CBRRU 24-31NH)

CERTIFICATION OF
APPLICANT

CONTINENTAL RESOURCES, INC)

STATE OF SOUTH DAKOTA)
COUNTY OF HARDING) SS

I, Nik Gardner, the applicant in the above matter after being duly sworn upon oath hereby certify the following information in regard to this application:

South Dakota Codified Laws Section 1-40-27 provides:

"The secretary may reject an application for any permit filed pursuant to Titles 34A or 45, including any application by any concentrated swine feeding operation for authorization to operate under a general permit, upon making a specific finding that:

(1) The applicant is unsuited or unqualified to perform the obligations of a permit holder based upon a finding that the applicant, any officer, director, partner, or resident general manager of the facility for which application has been made:

- (a) Has intentionally misrepresented a material fact in applying for a permit;*
- (b) Has been convicted of a felony or other crime of moral turpitude;*
- (c) Has habitually and intentionally violated environmental laws of any state or the United States which have caused significant and material environmental damage;*
- (d) Has had any permit revoked under the environmental laws of any state or the United States;*
- (e) Has otherwise demonstrated through clear and convincing evidence of previous actions that the applicant lacks the necessary good character and competency to reliably carry out the obligations imposed by law upon the permit holder; or*

CERTIFICATE OF APPLICATE – FORM 13
PAGE 2

(2) The application substantially duplicates an application by the same applicant denied within the past five years which denial has not been reversed by a court of competent jurisdiction. Nothing in this subdivision may be construed to prohibit an applicant from submitting a new application for a permit previously denied, if the new application represents a good faith attempt by the applicant to correct the deficiencies that served as the basis for the denial in the original application.

All applications filed pursuant to Titles 34A and 45 shall include a certification, sworn to under oath and signed by the applicant, that he is not disqualified by reason of this section from obtaining a permit. In the absence of evidence to the contrary, that certification shall constitute a *prima facie* showing of the suitability and qualification of the applicant. If at any point in the application review recommendation, or hearing process, the secretary finds the applicant has intentionally made any material misrepresentation of fact in regard to this certification, consideration of the application may be suspended and the application may be rejected as provided for under this section.

Applications rejected pursuant to this section constitute final agency action upon that application and may be appealed to circuit court as provided for under chapter 1-26."

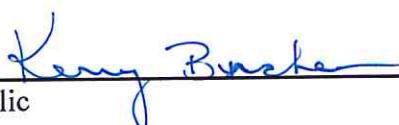
Pursuant to SDCL 1-40-27, I certify that I have read the forgoing provision of state law, and that I am not disqualified by reason of that provision from obtaining the permit for which application has been made.

Dated this 22 day of JUNE, 2016.



Applicant

Subscribed and sworn before me this 24th day of June, 2016.



Notary Public

My commission expires: 4/27/18



ATTACH SHEET DISCLOSING ALL FACTS PERTAINING TO
SDCL 1-40-27 (1)(a) THROUGH (e).
ALL VIOLATIONS MUST BE DISCLOSED, BUT WILL NOT
AUTOMATICALLY RESULT IN THE REJECTION OF AN APPLICATION.