STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

FORM C-108 Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I.	PURPOSE: X Secondary Recovery Pressure Maintenance Disposal Storage Application qualifies for administrative approval? Yes X No
II.	OPERATOR: Sundown Energy, LP (OGRID-232611)
	ADDRESS: 13455 Noel Road, Suite 2000 Dallas, Texas 75240
	CONTACT PARTY: Ross Pearson PHONE: (214) 368-6100
III.	WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
IV.	Is this an expansion of an existing project? Yes X No If yes, give the Division order number authorizing the project:
V.	Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
VI.	Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
VII.	Attach data on the proposed operation, including:
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
*VIII.	Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
IX.	Describe the proposed stimulation program, if any.
*X.	Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
	Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
XII.	Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
XIII.	Applicants must complete the "Proof of Notice" section on the reverse side of this form.
	Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
	NAME: Ross Pearson TITLE: Area Production Manager
	NAME: Ross Pearson TITLE: Area Production Manager SIGNATURE: DATE: 7/16/13
•	E-MAIL ADDRESS: rpearson@sundownenergy.com If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal:
DISTR	IBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
 - (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
 - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
 - (3) A description of the tubing to be used including its size, lining material, and setting depth.
 - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated,
 - (1) The name of the injection formation and, if applicable, the field or pool name.
 - (2) The injection interval and whether it is perforated or open-hole.
 - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
 - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
 - (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

C-108 Application Sundown Energy, LP

Arco 28 State Well No. 1 API No. 30-025-29340 660' FNL & 660' FEL (Unit A) Arco 28 State No. 2 API No. 30-025-29526 330' FNL & 1650' FEL (Unit B)

Both in Section 28, T-18S, R-35E, NMPM <u>Lea County, New Mexico</u>

- I. The purpose of the application is to request approval to re-enter the plugged and abandoned Arco 28 State Wells No. 1 & 2 and convert these wells to Queen water injection wells within the proposed Reeves Queen Unit Waterflood Project which will initially comprise the SE/4 SE/4 of Section 21, SW/4 of Section 22, NW/4 of Section 27 and the NE/4 of Section 28, all in Township 18 South, Range 35 East, NMPM, Lea County, New Mexico.
- II. Sundown Energy, LP ("Sundown")
 13455 Noel Road
 Suite 2000
 Dallas, Texas 75240
 Contact Party: Ross Pearson (214) 368-6100
- III. Injection well data sheets and wellbore schematic diagrams showing the current and proposed wellbore configurations are attached.
- IV. This is not an expansion of an existing project.
- V. Attached is a map that identifies all wells/leases within a 2-mile radius of the proposed injection wells and a map that identifies the ½ mile "Area of Review" ("AOR") for both injection wells.
- VI. AOR well data is attached. Well construction data is included for all existing wells within the AOR. Also included are wellbore diagrams for each PA'd well within the AOR. An examination of the well completion and plugging data indicates that all AOR wells are adequately cased, cemented and/or plugged and abandoned in order to preclude the movement of fluid from the injection zone into any fresh water aquifers.
- VII. 1. The average injection rate is anticipated to be approximately 500 BWPD. The maximum rate will be approximately 1,000 BWPD. If the average or maximum rates increase in the future, the Division will be notified.
 - 2. This will be a closed system.

- 3. Sundown will initially inject water into the subject wells at a surface pressure that is in compliance with the Division's limit of 0.2 psi/ft., or approximately 894 psi. The maximum surface injection pressure is anticipated to be approximately 2,200 psi. If a surface injection pressure above 894 psi is necessary, Sundown will conduct step rate injection tests to determine the fracture pressure of the Queen formation in this area.
- Produced water from the Devonian and Queen formations will be injected into the subject wells. Attached is a Devonian produced water analysis from Paladin Energy Corporation's South Vacuum Well No. 5 and a Queen produced water analysis from Sundown's Lea 403 State Well No.
 Also attached is a compatibility test indicating that slight scaling may result from combining Devonian and Queen produced water.
- 5. Injection is to occur into a formation that is oil productive.

VIII. Geologic Series:

Guadalupian

Geologic Formation:

Oueen

Thickness:

16 Feet

Lithology:

Sandstone

USDW's:

Ogallala is present at a maximum depth of

approximately 156 feet according to attached data obtained from the New Mexico State Engineer's Office. The average depth to water in this area is

approximately 73-76 feet.

- IX. No stimulation of the wells is planned
- X. Logs were filed at the time of drilling.
- XI. Attached is a fresh water analysis obtained from a fresh water well located within one-mile of the proposed injection wells.
- XII. Affirmative statement is enclosed.
- XIII. Proof of Notice is enclosed.

INJECTION WELL DATA SHEET

OPERATOR: Sundown Energy, LP		
WELL NAME & NUMBER: Arco 28 State No. 1 (API No. 30-025-29340)	
WELL LOCATION: 660' FNL & 660' FEL FOOTAGE LOCATION	A UNIT LETTER SE	28 18 South 35 East CTION TOWNSHIP RANGI
WELLBORE SCHEMATIC	WELL CON	VSTRUCTION DATA rface Casing
See Attached Wellbore Schematic	Hole Size: 17 ½"	Casing Size: 13 3/8" @ 490
	Cemented with: 475 Sx	<u>k.</u> or ft
·	Top of Cement: Surfac	Method Determined: Circulate
	Intern	mediate Casing
	Hole Size: 11"	Casing Size: 8 5/8" @ 3.910
	Cemented with: 1700 S	Sx. or ft
	Top of Cement: Surfac	Method Determined: Circulat
	Pro	duction Casing
	Hole Size: 7 7/8"	Casing Size: 4 ½" @ 4.652'
	Cement with: 480 Sx.	fi
·	Top of Cement: 1,750'	Method Determined: T.S.
	Total Depth: 10,300' PB	TD: 4,652'
	<u>Inject</u>	ion Interval
	Perforated In	terval -4,472'-4,488'

INJECTION WELL DATA SHEET

Րubing	g Size: 2 3/8" 4.7# J-55	Lining Material:	Internally Plastic Coated
Гуре	of Packer: Baker AD-1 Injection Packer		
Packer	r Setting Depth: 4,422' or within 100' of t	the uppermost injection p	perforations
Other	Type of Tubing/Casing Seal (if applicable): No	one	
	Additional	<u>Data</u>	•
1.	Is this a new well drilled for injection:	Yes	XNo
	If no, for what purpose was the well originally drilled: subsequently completed as a producing well in the Que		
2.	Name of the Injection Formation: Queen		
3.	Name of Field or Pool (if applicable): Reeves-Q	ueen Pool (Oil-52070)	
4.	Has the well ever been perforated in any other zone(s) i.e. sacks of cement or plug(s) used.	? List all such perforated	d intervals and give plugging detail,
	None		
5.	Give the name and depths of any oil or gas zones unde in this area:	rlying or overlying the p	proposed injection zone
	Within the proposed waterflood project area in Section 9,000'); South Vacuum-Devonian (11,000'-12,000');		

Current Wellbore Configuration

Arco 28 State No. 1
API No. 30-025-29340
660' FNL & 660' FEL (Unit A)
Section 28, T-18 South, R-35 East, NMPM

Sundown Energy, LP

17 ½" Hole; Set 13 3/8" J-55 Csg @ 490' Cemented w/475 Sx.
Cement circulated to surface

Set 40 sx. cement plug 341'-525'

Drilled: 7/1985 Plugged: 5/1997

Cut & pulled 4 1/2" casing @ 1,375' Set 25 sx. cement stub plug 1,290'-1,425'

TOC @ 1,750' by T.S.

11" Hole; Set 8 5/8" K-55 csg @ 3,910' Cemented w/1700 sx. Cement circulated to surface

Set CIBP @ 4,400' w/25 sx. cement on top

Queen Perforations: 4,472'-4,488'

7 7/8" Hole; Set 4 ½" K-55 csg @ 4,652' Cemented w/480 sx. TOC @ 1,750 by T.S.

Set 60 Sx. cement plug @ 4,652'-4,743'

Set 50 Sx. cement plug @ 5,542'

Set 55 Sx. cement plug @ 7,114'

Set 55 Sx. cement plug @ 8,784'

Set 55 Sx. cement plug @ 9,865'

T.D. 10,300

OISTRIBUTION SANTA FE FILE	NEW MEXICO OIL CONSERVATION COMMISSION	Form C-103 Supersades Old C-102 and C-103 Effective 1-1-65
U.S.G.S. LAND OFFICE OPERATOR		State X Fee 5. State Oil 6 Gas Lease No.
SUNDR	Y NOTICES AND REPORTS ON WELLS POSALE TO OBILL ON TO DECREN ON PLUG BACK TO A DIFFERENT RESERVOIR, ION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS,	
OIL X SAS WELL .	OTHER.	7. Unit Agreement Name
Z. Name of Operator Tamarack Petroleum (Company, Inc.	Arco "28" State /
P. O. Box 2046, Mid	and, TX 79702	9. Well No. #1
4. Location of Well UNIT LCITES A 66	North LINE AND 660	South Vacuum
1	N 28 TOWNSHIP 185 RANGE 1 38E	
	15. Elevation (Show whether DF, RT, GR, etc.) 3910.7 GR	12. County Lea
Check /	appropriate Box To Indicate Nature of Notice, Report or	
PLRFORM REMEDIAL WORK TEMPORARILY ABANDON PULL OR ALYER CASING	PLUG AND ABANDON REMEDIAL WORK COMMENCE DRILLING OPNS. CHANGE PLANS CASING TEST AND CEMENT JOB X	ALTERING CASING PLUG AND ABANDONMENT
OTHER		
work) SEE RULE 1503.	crations (Clearly state all pertinent details, and give pertinent dates, includ	ling estimated date of starting any proposed
 Cemented to surface wi Nippled up Shaffer Ser Drill ll" hole from 49 Ran 93 jts. 8 5/8" 24 Cement w/1500 sks Hall Circulated 125 sacks. Nipple up Shaffer Seri Drill 7 7/8" hole from Pump 55 sks Class H Ne H Neat at 7114'. Pump 5 top of plug at 4602'. Ran 124 jts 4 1/2 10.5 	50# J-55 casing. Set at 490' on 7-24-85. th 475 sks Class C 2% CaCl2 circulated 60 sks ies 900 Type E BOPE and tested to 2000#. 0 to 3910. & 32# K-55 casing to 3910' on 7-28-85. iburton Lite 1/4# Flocele 15# salt & 200 sks es 900 Type E BOPE and tested to 2500#. 3910' to 10,300'. Ran open hole logs 8-23-85 at at 9865'. Pump 55 sks Class H Neat at 8784 0 sks Class C Neat at 5542'. Pump 60 sks Class Dress off with 7 7/8" bit to 4652. 0# K-55 casing to 4652' on 8-25-85. ss C 1/4# Flocele, 5# salt \$\mathcal{L}^2\$ 3% Halad 9. Top o	Class C 2% C _a Cl ₂ . ! Pump 55 sacks Class s C Neat at 4743'. Tag
12 / 1	bave is true and complete to the best of my knowledge and belief. Engineering Manager	9-11-85
GERBINAL SIGNE	NOTES YES	DATE

CONDITIONS OF APPROVAL, IF ANY:

— Submit 3 Copies to Appropriate District Office	State of N Energy, Minerals and Nati				Form C-10 Revised 1-1	
DISTRICT I P.O. Box 1980, Hobbs, NM 88240	OIL CONSERVA P.O. Bo	x 20	38	WELL API NO.	30-025-2934	10
DISTRICT II P.O. Drawer DD, Arcella, NM \$4210	Santa Fe, New Me	exico	87504-2088	5. Indicate Typ	STATE X	FEE
DISTRICT III 1000 Rio Brazos Rd., Aziec, NM 17410				6. Suis Oil & 6 01-A-28-		rus (
(DO NOT USE THIS FORM FOR PRODIFFERENT RESERVED (FORM C	ICES AND REPORTS ON OPOSALS TO DRILL OR TO DE RVOIR. USE "APPUCATION R -101) FOR SUCH PROPOSALS	EPEN OR PE	OR PLUG BACK TO A	1	or Usit Agreement Name "28" State	
i. Type of Well: On. OAS WELL X WELL	OTI-SOR					
Z Name of Operator Tamarack Petroleum Co				8. Well No.	1	
1 Address of Operator 500 W. Texas, Suite 1	485 - Midland, TX	7970)1	9. Pool name of Reeves	Wika: 5 (Queen)	
4. Well Location Unit Letter A : 66	O Feet From The Nort	:h	Line and 660	Foot Fro	con The East	Luce
Section 28	Township 18S			NMPM	Lea	County
	10. Elevation (Show w	rheiher	DF, RKB, RT, GR, etc.)			
II. Check . NOTICE OF INT	Appropriate Box to Indi	cate)		-	er Data REPORT OF:	<u> </u>
	- "			שן ריין		
PERFORM REMEDIAL WORK TEMPORARILY ABANDON	PEUG AND ABANDON		REMEDIAL WORK		ALTERING CASING	LL XX Tables
PULL OR ALTER CASING	CHANGE PLANS	ليا	CASING TEST AND CE		PLUG AND ABANDO	MENI
OTHER:			OTHER:	MENT JUS (-	
5/8/97 Cut 4-1/2" 5/9/97 Spot 25 sks 5/9/97 Spot 40 sks	BP @ 4400'. .25 sks cement. casing @ 1375'. s cement @ 1425'.	Tag Sag (@ 1290'. 9 341'.			

SIONATURE SIONATURE	cele	26	Bre		Presid	lent	DATE _	5/13/97
TYPE ON FRINT HAVE			SNG Well	-			TELETAK	ON'S NO.
CENTER FOR A MINIS THAT	Wary.	illa 6	Lip	үп	OI.	TORK NO	PECTOR	177

I hereby certify that the information above to true and complete to the best of any knowledge and belief.

Proposed Wellbore Configuration

Besch

Sundown Energy, LP
Arco 28 State No. 1
API No. 30-025-29340
660' FNL & 660' FEL (Unit A)
Section 28, T-18 South, R-35 East, NMPM

17 ½" Hole; Set 13 3/8" J-55 Csg @ 490' Cemented w/475 Sx.
Cement circulated to surface

Drilled: 7/1985

Bowen casing bowl/patch w/cementing ports Set 4 1/2" 10.5# J-55 tieback casing @ 1,375'. Cement with sufficient cement to circulate to surface.

TOC @ 1,750' by T.S.

2 3/8" 4.7 # J-55 IPC tubing set in a Baker AD-1 Packer @ 4,422'

11" Hole; Set 8 5/8" K-55 csg @ 3,910' Cemented w/1700 sx. Cement circulated to surface

Queen Perforations: 4,472'-4,488'

7 7/8" Hole; Set 4 ½" K-55 csg @ 4,652' Cemented w/480 sx. TOC @ 1,750 by T.S.

Set 60 Sx. cement plug @ 4,652'-4,743'

Set 50 Sx. cement plug @ 5,542'

Set 55 Sx. cement plug @ 7,114'

Set 55 Sx. cement plug @ 8,784'

Set 55 Sx. cement plug @ 9,865'

T.D. 10,300'

INJECTION WELL DATA SHEET

OPERATOR: Sundown Energy, LP		·
WELL NAME & NUMBER: Arco 28 State No. 2 (AP)	[No. 30-025-29526)	
WELL LOCATION: 330' FNL & 1650' FEL FOOTAGE LOCATION		8 18 South 35 East TION TOWNSHIP RANGE
WELLBORE SCHEMATIC	WELL CONS	TRUCTION DATA ace Casing
See Attached Wellbore Schematic	Hole Size: 11"	Casing Size: <u>8 5/8" @, 475'</u>
	Cemented with: 300 Sx.	ft ³
·	Top of Cement: Surface	Method Determined: Circulated
	Interme	ediate Casing
	Hole Size:	Casing Size:
	Cemented with:	orft ³
	Top of Cement:	Method Determined:
·	Produ	ection Casing
	Hole Size: <u>7 7/8"</u>	Casing Size: 4 1/2" @ 4,559'
	Cement with: 1250 Sx.	orft ³
	Top of Cement: Surface	Method Determined: Circulated
	Total Depth: 4.560'	
	Injection	n Interval

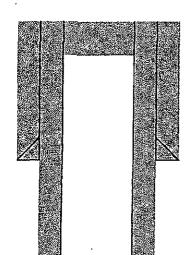
Perforated Interval -4,480'-4,483'

INJECTION WELL DATA SHEET

Fubin	g Size: 2 3/8" 4.7# J-55	Lining Material:	Internally Plastic Coated
Гуре	of Packer: Baker AD-1 injection pac	cker	
Packe	er Setting Depth: 4,430' or within 1	100' of the uppermost in	ection perforations
Other	Type of Tubing/Casing Seal (if applicable):	None	
	Ado	ditional <u>Data</u>	
1.	Is this a new well drilled for injection:	Yes	XNo
	If no, for what purpose was the well originally interval.		
2.	Name of the Injection Formation: Qu		
3.	Name of Field or Pool (if applicable): Re	eeves-Queen Pool (Oil-5	2070)
4.	Has the well ever been perforated in any other i.e. sacks of cement or plug(s) used.	zone(s)? List all such pe	erforated intervals and give plugging detail,
	None		
5.	Give the name and depths of any oil or gas zon in this area:	es underlying or overlyi	ng the proposed injection zone
	Within the proposed waterflood project area in 9 000'): South Vacuum-Devonian (11 000'-12		S, R-35E: South Vacuum-Bone Spring Pool (8,000

છે

Current Wellbore Configuration



Set 25 sx. cement plug 147'-Surface

Sundown Energy, LP Arco 28 State No. 2 API No. 30-025-29526 330' FNL & 1650' FEL, Unit B Section 28, T-18S, R-35E

11" Hole; Set 8 5/8". K-55 csg. @ 475'

Drilled:

12/1985

Cemented w/300 sx.

Cement circulated to surface

Plugged:

5/1997

Set 25 sx. cement plug 1,620'-1,760'

Set CIBP @ 4,400' w/25 sx. cement on top

Queen Perforations: 4,480'-4,483'

7 7/8" Hole; Set 4 1/2" K-55 csg. @ 4,559'

Cemented w/1250 Sx.

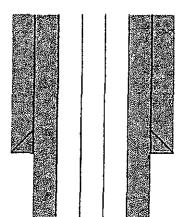
Cement circulated to surface.

T.D. 4,560'

Submit J Copies to Appromists District Office	Energy, Minerals and Natural Re		Form C-103 Revised 1-1-89
DISTRICT! P.O. Box 1980, Hobbs, NM 88240	OIL CONSERVATIO		WELL API NO.
DISTRICT II P.O. Drawer DD, Arlesia, NM \$8210	Santa Fe, New Mexico		30-025-29526 5. Indicate Type of Lease
DISTRICT III 1000 Rio Brizos Rd., Aricc, NM 87410		•	STATE X FEE 6. Sista Oil & Cus Lessa No. 02-B-28-18S-35E
SUNDRY NO	TICES AND REPORTS ON WEL	LS	
(DO NOT USE THIS FORM FOR PE DIFFERENT RESE	ROPOSALS TO DRILL, OR TO DEEPEN PRIVOIR, USE "APPLICATION FOR PEI C-101) FOR SUCH PROPOSALS,)	OR PLUG BACK TO A	7. Lease Name or Unit Agreement Name
1. Type of Well: Out M	Othesa		ARCO "28" State
2 Name of Operator Tamarack Petroleum Co.	, Inc.		& Well Na 2
3. Address of Operator			9. Pool name or Wildcat
500 W. Texas, Suite 14	85 Midland, TX 7970	1	Reeves (Queen)
	650 Foot From The East	Line and 330	Feet From The North Line
Sarting 28	Township LSS Ra	nge 35 E	NMPM Lea County
Soction 28	Township 185 Ra		V/////////////////////////////////////
	Appropriate Box to Indicate 1	Vature of Motice P.	enort or Other Data
NOTICE OF IN	•• •		SEQUENT REPORT OF:
L4	, —		
PERFORM REMEDIAL WORK	PLUG AND ABANDON	REMEDIAL WORK	ALTERING CASING
TEMPORARILY ABANDON	CHANGE PLANS	COMMENCE DRILLING	<u> </u>
PULL OR ALTER CASING		CASING TEST AND CE	MENT JOB L
OTHER:		OTHER:	
12. Describe Proposed or Completed Oper work) SEE RULE 1103.	rations (Clearly state all persinent details, an	d give persinent dates, includ	ting extimated date of starring any proposed
5/6/97 Set 4½" CI 5/6/97 Spot 25 sk	BP @ 4400'. Cap w/25 s s cement @ 1760' to 162	sks cement.	
•		^	0 = 0
5/12/97	set Dry Hole	marke	per 6DC
-/ (/ /) []	ac. in. it its in	•	•
			•
			-
•		,	
•			
I beroby eartify that the information above as to	us and complete to the test of my knowledge and	belief,	
SIONATURE STATES	D. Areng "	President	DATE 5/13/97.
medicionum Charley	Gregg - SNG Well P&A Se	rvices, LLC	TELEPHONE NO.
erico spaço no maio chaj	./ .	*	" OF THE ROTE TOP "

Proposed Wellbore Configuration

Sundown Energy, LP Arco 28 State No. 2 API No. 30-025-29526 330' FNL & 1650' FEL, Unit B Section 28, T-18S, R-35E



11" Hole; Set 8 5/8" K-55 csg. @ 475'

Drilled:

12/1985

Cemented w/300 sx.

Cement circulated to surface

2 3/8" 4.7# J-55 IPC tubing set in a Baker AD-1 packer @ 4,430'

Queen Perforations: 4,480'-4,483'

7 7/8" Hole; Set 4 1/2" K-55 csg. @ 4,559'

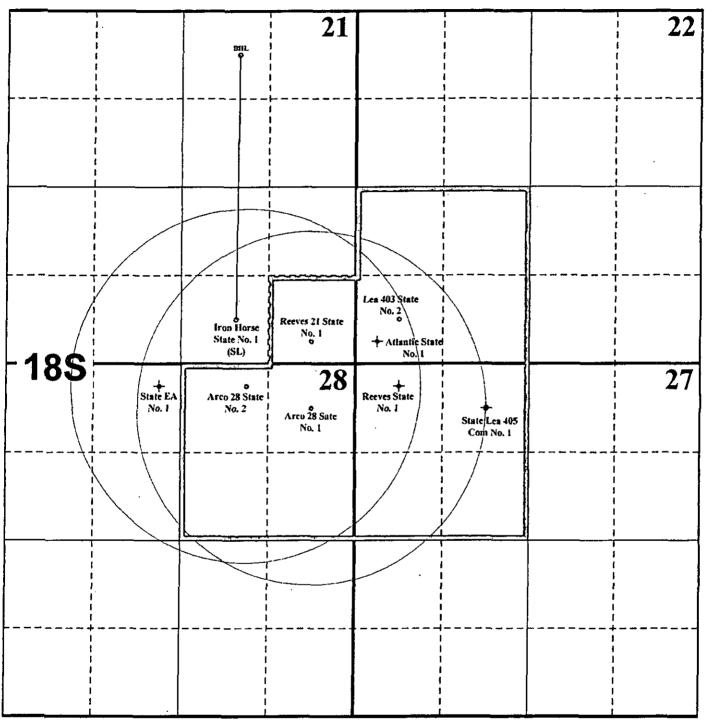
Cemented w/1250 Sx.

Cement circulated to surface.

T.D. 4,560'

õ





- O Proposed Injection Well
- O Producing Well
- PA'd Well

Proposed Secondary
Recovery Unit Area

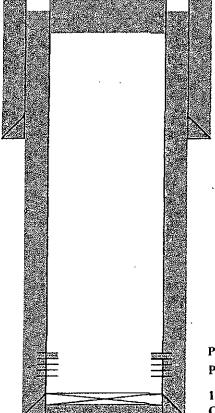
Sundown Energy, LP Reeves Queen Unit Waterflood ½ Mile AOR Map

SUNDOWN ENERGY, LP FORM C-108: AREA OF REVIEW WELL DATA REEVES QUEEN UNIT WATERFLOOD PROJECT

APT NUMBER	OPERATOR	LEASE NAME	WELL NO.	TYPE TYPE		176			Did S	Sec.	TOPE	PONE	EQATES OF THE STATE OF THE STAT	TOTAL	HOLE	C80.	AT	GMT	CMT TOP	MTO	HOLE	C80.	AT	CMT.	CMT TOP	wip	COMPLETION		REMARKS	
30-025-30514	Sundown Energy, LIP	Reeves 21 State	1	Р	Active	330"	5 6	o E	P	21	185	35E	May 89	4,565	14 3/4*	11 3/4	1,761	950	Surface	Circ.		8 5/8"	3,052		Surface	Circ.	4,460'-4,475' Perf			
	· · · · · · · · · · · · · · · · · · ·	 	-	┝╌					-	┼				 	├	<u> </u>	┼	-	+	╂	7 7/8	5 1/2	4,585	1010	1,417	Calc	Queen	2nd-460 sx. E	OV Tool #2 3,1	18'
20.025.074.0	Dec Description Co. (1)	Europha Of Com-		P	ND	1980		O E		21	100	35 <u>€</u>	ADO	Time I and I	10452	46.00	1		1	1										
30-025-31442	Pogo Producing Co. LLC	Eureka 21 State	 	-	, NU	1,000	5 10	~ -	++	1 4.	100	30±	APU	Expired	T	4.44411 1.84B	VOI UT	iseo .		+-	 -	ļ		 -						
30-025-38193	Oxy USA, Ric.	Iron Horse State	1	P	Active		S 16			21			Oec-06	8,220	17 1/2*	13 3/8	528	450	Surfec	e Circ.				1,100	Surface	CIrc.	4,777-8,077	Total Depth: I	8,220 MO. 4	462 TVD.
			4	μ-	BHL	4811	\$ 17	77 E	_ B	21	185	35E		MD.				<u> </u>		\mathbf{I}	7 7/8	5 1/2	8,200*	1050	3,520	CBL	Queen			
30-025-03127	Sundown Energy, LP	Los 403 State	2	P	Active	650	S 6	sor W	M	22	185	35E	May-58	11,978	17 1/4"	13 3/8	332	400	Surface	e Circ.	12 1/4	9 5/8	4,000	1.650	460	Well File	4,432'-4,450' Peri	Well Drilled to	11,978° In 19	58 & PA'd
																						41/2	4,567		Surraço			Well Re-color		
1958-Well plu	gged: 25 Sx11,913-11.	978 30 Sx8.321'-	3.400	100 Sx.	7,100-7;	275' 2	<u>5 Sx, 7</u>	068 7,	34, 5	5 Sx3	934'-4	000	Cut & Put	od 9 5/8	60 440	25 Sx	45 47	5 25	Sx270'-	33 <u>2 .</u> \	Vell Re-	entered in	1990 & drike	d to 4,6	00'. Set 4	1/2" cesin	@ 4.567 & come	ded w/1280 sx.	Queen Com	pletion
30-025-23480	Lestherwood Drilling Co	Atlantic State	1	Ory	PA	330	S 3	30" N	/ M	22	185	35€	Apr-70	4,975	12	8 5/8	378	275	Surfec	e Circ	<u> </u>			<u> </u>				Dry Hole, PA	Schematic A	tached.
30-025-03145	Pride Energy Company	State Lae 405 Con	n 1	P	PA	666	N 19	80° W	/ c	27	188	35E	Dec-57	11,783	15 1/2	13 3/8	325	400	Surfac	e Circ	12 1/4	9 5/8"	4990	1900		Well File		PA Schematic	Atteched.	
		1									 	1		Υ		-	\perp	Ι_		Ţ	334	7	11,783	300	8,090	Well File				
30-025-30550	Hondo Oil & Gas Co.	Reeves State	11	Dry	PA	330	N 6	60' V	/ D	27	185	35€	Mar-89	5,690	12 1/4	8.5/6	458	300	Surfec	e Circ	7 7/8	51/2"	1,885'	450	595	Well File		Dry Hote, PA	Schemetic A	ttached.
30-025-30315	Oxy USA, Inc.	State EA	1	Dry	PA	330	N 2	10 V	, c	28	185	35€	Mar-88	4,780	12 1/4	8 5/8	378	275	Surfac	e Circ	<u> </u>	 	<u> </u>	1-				Dry Hole, PA	Schematic A	teched

Pride Energy Company
State Lea 405 Com No. 1
API No. 30-025-03145
660' FNL & 1980' FWL (Unit C)
Section 27, T-18 South, R-35 East, NMPM

25 Sx. surface



15 1/2" Hole; Set 13 3/8" Csg @ 325'

Cemented w/400 Sx.

Cement circulated to Surface

Drilled: 12/1957 Plugged: 1/1971

Perforations 4,652'-4,777' Squeezed w/200 sx. Perforations 4,753'-4,843'

12 '4" Hole; Set 9 5/8" Csg @ 4,990' Cemented w/1900 sx. TOC @ 31' by Well File

7" casing cut & pulled @ 5,100'. Cement retainer @ 4,956'. Set 25 Sx. cement plug 4,990'-5,100'

Perforations 6,134'-6,151'
Perforations 6,334'-6,340' squeezed w/75 sx.
Perforations 6,368'-6,374'
Perforations @ 6,494 squeezed w/75 sx.

TOC @ 8,090' (Well File)

Set 40 sx. cement plug 8,450'-8,681'

Bone Spring Perforations: 8,649'-8,681'

DV Tool @ 8,812'

Set CIBP @ 11,602 w/6' cement on top

Devonian Perforations: 11,686'-11,722'

Devonian Perforations: 11,769'-11,774'. Squeezed w/ 125 Sx.

8 3/4" Hole; Set 7" Csg. @ 11,783' 1st. Stage-150 Sx. 2nd Stage-150 Sx.

DV Tool @ 8,812' TOC @ 8,090' by Well File

T.D. 11,783"

NO. OF COPIES RECEIVED	٦			
}	 	•	Form C-103 Supersedes Old	
SANTA FE	NEW MENICO OF COM	CERVATION COMMENTS	C-102 and C-103	!
FILE	NEW MEXICO OIL CON	SERVATION COMMISSION	Effective 1-1-65	
	4		5a. Indicate Type of	T 4204
U.S.G.S.	-{		State XX	Fee [
LAND OFFICE	4			
OPERATOR .	J		5. State Oil & Gas 1 E-16	
SUNDS	RY NOTICES AND REPORTS OF	WELLS BACK TO A DIFFERENT RESERVOIR. ICH PROPOBALE.		
I. SIL X ' SAS C	OTHER-		7, Unit Agreement N	ccine
2. Name of Operator			8. Form or Lease No	ime
NILLIAM G. McCOY 3. Address of Operator			State "40	5"
P.O. Box 1352, R	oswell, New Mexico 8820	1	1	
4. Location of Well			10. Field and Pool,	
UNIT LETTERC,	660 FRET FROM THE North	LINE AND 1980 PEET FROM	Field Wild	cat
THE WEST LINE SECTS	on 27 TOWNSHIP 18	-S RANGE 35-E NMPM	HHHHH	
	15, Elevation (Show whethe	r DF, RT, GR, etc.)	12, County	
	3893' GL		l Lea E	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Appropriate Box 10 Indicate I ITENTION TO:	Nature of Notice, Report or Ot SUBSEQUEN	her Data T REPORT OF:	
PERFORM REMEDIAL WORK	PLUG AND ABANDON	REMEDIAL WORK	ALTERING	
TEMPORARILY AGAHDON	ACGG WED YEARDON	COMMENCE DRILLING OPNS.		ABAHDOHMENT X
PULL ON ALTER CASING	CHANGE PLANS	CASING TEST AND GEMENT JOS	FEOR AND	TATI
POCT OF ACIEN CASING	LHANGE TEARS ()]		m
OTHER		OTHER	······································	
		latis, and give pertinent dates, including		<u> </u>
1971. 25 sx plus	g from 5100' to 4990'.	mission from Mr. Joe Ræ Retainer at 4956'. 25 s ion. Well ready for ins	sx plug at sur	16, face.
		•	ì	
	, , , , , , , , , , , , , , , , , , ,			
8. I hereby certify that the information	above is true and complete to the best	of my knowledge and bellef.		
4/1 mela			ا العامة العام ا	
IGNED W. III	TITLE 0	perator	. BATE 2/11/	
PPROVED BY John with	unyan TITLE	Geelogist	DATE MAY	6 1971
An Anna Land	/			

DISTRIBUTION DISTRIBUTION ANT A F. DISTRIBUTION NEW MEXICO GIL CONSERVATION COMMISSION NEW MEXICO GIL CONSERVATION COMMISSION NEW MEXICO GIL CONSERVATION COMMISSION Substitute City of Lorente No. Substitute City of		·	
MEW MEXICO GIL CONSERVATION COMMISSION Constitution Constitut	NO. OF COPIES RECEIVED		
Substitution of Superior Super			
Substitute Proposed of Completed Describing Processes of Completed Operations of Clearly state of persons of Completed Control of Co		NEW MEXICO OIL CONSERVATION COMMISSION	Effective 1-1-65
DO NOT LITTLE FORM OF THE PROPERTY OF THE PROP			Sa. Indicate Type of Leave
SUNDRY NOTICES AND REPORTS ON WELLS OF THE WASHINGTON OF THE WASH			State XX
SUNDER OF USE THE PROPOSED AND COMMENCE PLANS PROPORTS ON WELL S SUNDER OF USE THE PROPORT OF STATE			<u> </u>
The of Copering State 1 (April Agreement Name) WILLIAM G. MCCOY Addies of Copering State 1 (April 7) Addies of Copering State 1 (April 7) Addies of Copering State 1 (April 7) According the State 1 (April 7) April 1 (April 1 (April 2 (April	OFERATOR	,	
PILLIAM 6. MCCOY Address of Commons WILLIAM 6. MCCOY Address of Commons P. O. BOX 1352, ROSHELL, NEW MEXICO 88201 Location of Well WILLIAM 6. MCCOY Address of Commons P. O. BOX 1352, ROSHELL, NEW MEXICO 88201 Location of Well WILLIAM 6. MCCOY Address of Commons William 7. Location of Well William 7. Location of Well William 7. Location of Well William 7. Location 7. Commoning 18th whether DF, RT, GR, etc.) I.S. Elevation 78th whether DF, RT, GR, etc.) Location 78th recommon 18th recom	SUNDRY	NOTICES AND REPORTS ON WELLS	
INSURED COPRISON WILLIAM 6. MCCOY Address of Coperior P. O. BOX 1352, ROSWELL, NEW MEXICO 88201 Location of Well West C 660 **TET FOR A TACK West List, SETION 18-5 **ANDRIF** Check Appropriate Box To Indicate Nature of Notice, Report or Other Data NOTICE OF INTENTION TO: **SUBSEQUENT REPORT OF: **SUBSEQUENT REPORT OF: **CHARGANALY SARADON CHARGE PLAND **CHARGE PLAND **THE ANDRIFY SARADON CHARGE PLAND **CHARGE PLAND **THE ANDRIFY SARADON CHARGE PLAND **THE ANDRESS SARADON CHARGE PLAND **THE ANDRESS SARADON CHARGE PLAND **THE ANDRESS SARADON **THE AN		H FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)	7. Unit Agreement Nume
**************************************		OTHER-	
Addition of Operation P. O. BOX 1352, ROSWELL, NEW MEXICO 88201 1. Location of Wall OUTLIFEER C 660 PREFURENCE NORTH 18-S 35-E 18			
Location of Well Officer C Offi			
West 18.6, SECTION 27 TOWNSHIP 18-S AND STATE 1980 THE West 18.6, SECTION 27 TOWNSHIP 18-S AND STATE 18-S AND		OSWELL, NEW MEXICO 88201	1
West I.M. SECTION 27 TOWNSHIP 18-5 AAAG 35-E MAPPY 18-5 AAAG 35-E MAPPY 18-5 AAAG 35-E MAPPY 18-5 AAAG 35-E MAPPY 18-5 AAAG AAAG AAAAG AAAAAG AAAAAG AAAAAG AAAAAG AAAAAA	C 6		Field Wildcat
Check Appropriate Box To Indicate Nature of Notice, Report or Other Data NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF: PAUL AND ABANDON PULL AND ABANDON CHANCE PLAND ALTERING CANINE PLUE AND ABANDON ALTERING CANINE CHANCE PLAND ALTERING CANINE CHANCE PLAND ALTERING CANINE CHANCE PLAND ALTERING CANINE COMMINICATE COMMINICATE CHANCE PLAND ALTERING CANINE CHANCE PLAND ALTERING CANINE CHANCE PLAND ALTERING CANINE CHANCE PLAND ALTERING CHANDE ALTERING CANINE CHANCE PLAND ALTERING CANINE CHANCE PLAND ALTERING CANINE CHANCE PLAND ALTERING CANINE COMMINICATE CHANCE PLAND ALTERING CANINE CHANCE PLAND ALTERING CANINE COMMINICATE COMMINICATE COMMINICATE CHANCE PLAND ALTERING CANINE COMMINICATE COMMINICATE COMMINICATE CHANDA ALTERING CANINE COMMINICATE COMMINICATE CHANDA ALTERING CANINE CHANCE	UNIT LETTER	FEET FROM THE LINE AND FEET (
Check Appropriate Box To Indicate Nature of Notice, Report or Other Data NOTICE OF INTENTION TO: PREFORM REMEDIAL WORK PLAND PLUE AND ABANDON CHARGE PLAND CHARGE PLAN	THE WEST LINE, SECTION		MINIMININ MAN
Check Appropriate Box To Indicate Nature of Notice, Report or Other Data NOTICE OF INTENTION TO: PREFORM REMEDIAL WORK PLAND PLUE AND ABANDON CHARGE PLAND CHARGE PLAN		THE PERIOD OF TH	
PERFORM MEMEDIAL WORK PLUE AND ADADDON CHANGE PLAND COMMENCE DRILLING OPEN. OTHER 7. DESCRIBE PERFORMAGE PLAND CHANGE PLAND CHANGE PLAND CHANGE PLAND COMMENCE DRILLING OPEN. OTHER 7. DESCRIBE PERFORMED AND CHANGE PLAND COMMENCE DRILLING OPEN. OPERATIONS to re-work commenced with verbal approval from Mr. Runyan on December 7, 1970. 7" casing run and set on old casing at 5100'. Perforated 6494'. Squeezed 75 sx cement. Perforated 6334-40', 6368-74'. Actifized with 2500 gals. Swabbed slight show gas and drilling mud. Squeezed 75 sx at 6334-40. Perforated 6134-40', 6145-51'. Attempted to actifize. Well communicated. Pulled 7" casing. Set 25 sx plug at 5100' and 4990'. Set retainer at 4956'. Perforated 4662-54', 4670-72', 4753-55', 4775-77'. Attempted to actifize. Perforations communicated. Squeezed with 50 sx. Tested perforations. Still communication. Squeezed 150 sx. Drilled out. Perforated 4753-55, 4775-77. Attempted to acidize perforations. Perforations communicated. Perforated 4834-36, 4841-43'. Attempted to acidize. Perforations communicated. Prep. to P&A. Operator PAR. Operator PAR. Operator PAR. ALTERISC CABING CABING COMM. ALTERISC CABING COMMENT COMMENT COMMENT. COMMENT COMMENT. COMMEN			
PERFORM MEMEDIAL WORK PLUE AND ADADDON CHANGE PLAND COMMENCE DRILLING OPEN. OTHER 7. DESCRIBE PERFORMAGE PLAND CHANGE PLAND CHANGE PLAND CHANGE PLAND COMMENCE DRILLING OPEN. OTHER 7. DESCRIBE PERFORMED AND CHANGE PLAND COMMENCE DRILLING OPEN. OPERATIONS to re-work commenced with verbal approval from Mr. Runyan on December 7, 1970. 7" casing run and set on old casing at 5100'. Perforated 6494'. Squeezed 75 sx cement. Perforated 6334-40', 6368-74'. Actifized with 2500 gals. Swabbed slight show gas and drilling mud. Squeezed 75 sx at 6334-40. Perforated 6134-40', 6145-51'. Attempted to actifize. Well communicated. Pulled 7" casing. Set 25 sx plug at 5100' and 4990'. Set retainer at 4956'. Perforated 4662-54', 4670-72', 4753-55', 4775-77'. Attempted to actifize. Perforations communicated. Squeezed with 50 sx. Tested perforations. Still communication. Squeezed 150 sx. Drilled out. Perforated 4753-55, 4775-77. Attempted to acidize perforations. Perforations communicated. Perforated 4834-36, 4841-43'. Attempted to acidize. Perforations communicated. Prep. to P&A. Operator PAR. Operator PAR. Operator PAR. ALTERISC CABING CABING COMM. ALTERISC CABING COMMENT COMMENT COMMENT. COMMENT COMMENT. COMMEN	6. Check At	porropriate Box To Indicate Nature of Notice, Report or	Other Data
To Denorthe Proposed of Completed Operations (Glearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed or Completed Operations to re-work commenced with verbal approval from Mr. Runyan on December 7, 1970. 7" casting run and set on old casting at 5100'. Perforated 6494'. Squeezed 75 sx cement. Perforated 6334-40', 6368-74'. Acidized with 2500 gals. Swabbed slight show gas and drilling mud. Squeezed 75 sx at 6334-40. Perforated 6134-40', 6145-51'. Attempted to acidize. Well communicated. Pulled 7" casting. Set 25 sx plug at 5100' and 4990'. Set retainer at 4956'. Perforated 4662-54', 4670-72', 4763-55', 4775-77'. Attempted to acidize. Perforations communitated. Squeezed with 50 sx. Tested perforations. Still communication. Squeezed 150 sx. Drilled out. Perforated 4753-55, 4775-77. Attempted to acidize perforations. Perforations communicated. Perforated 4834-36, 4841-43'. Attempted to acidize. Perforations communicated. Preporated 4834-36, 4841-43'. Attempted to acidize. Perforations communicated. Preporations communicated. Preporations communicated. Preporated 4834-36, 4841-43'. Attempted to acidize. Perforations communicated. Preporated 4834-36, 4841-43'.	•		
To Denorthe Proposed of Completed Operations (Glearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed or Completed Operations to re-work commenced with verbal approval from Mr. Runyan on December 7, 1970. 7" casting run and set on old casting at 5100'. Perforated 6494'. Squeezed 75 sx cement. Perforated 6334-40', 6368-74'. Acidized with 2500 gals. Swabbed slight show gas and drilling mud. Squeezed 75 sx at 6334-40. Perforated 6134-40', 6145-51'. Attempted to acidize. Well communicated. Pulled 7" casting. Set 25 sx plug at 5100' and 4990'. Set retainer at 4956'. Perforated 4662-54', 4670-72', 4763-55', 4775-77'. Attempted to acidize. Perforations communitated. Squeezed with 50 sx. Tested perforations. Still communication. Squeezed 150 sx. Drilled out. Perforated 4753-55, 4775-77. Attempted to acidize perforations. Perforations communicated. Perforated 4834-36, 4841-43'. Attempted to acidize. Perforations communicated. Preporated 4834-36, 4841-43'. Attempted to acidize. Perforations communicated. Preporations communicated. Preporations communicated. Preporated 4834-36, 4841-43'. Attempted to acidize. Perforations communicated. Preporated 4834-36, 4841-43'.		(X)	A service causes
OPERATION ATTENDATED AND CEMENT JOB OTHER OTHER OPERATIONS Operations to re-work commenced with verbal approval from Mr. Runyan on December 7, 1970. 7" casing run and set on old casing at 5100'. Perforated 6494'. Squeezed 75 sx cement. Perforated 6334-40', 6368-74'. Actidized with 2500 gals. Swabbed slight show gas and drilling mud. Squeezed 75 sx at 6334-40. Perforated 6134-40', 6145-51'. Attempted to acidize. Well communicated. Pulled 7" casing. Set 25 sx plug at 5100' and 4990'. Set retainer at 4956'. Perforated 4662-54', 4670-72', 4753-55', 4775-77'. Attempted to acidize. Perforations communicated. Squeezed with 50 sx. Tested perforations. Still communication. Squeezed 150 sx. Drilled out. Perforated 4753-55, 4775-77. Attempted to acidize perforations. Perforations communicated. Perforated 4834-36, 4841-43'. Attempted to acidize. Perforations communicated. Perforated Prep. to P&A. 1. Thereby certify that the information above is true and complete to the best of my knowledge and boliof. 1. Thereby certify that the information above is true and complete to the best of my knowledge and boliof. 1. Thereby certify that the information above is true and complete to the best of my knowledge and boliof. 1. Thereby certify that the information above is true and complete to the best of my knowledge and boliof. 1. Thereby certify that the information above is true and complete to the best of my knowledge and boliof. 1. Thereby certify that the information above is true and complete to the best of my knowledge and boliof. 1. Thereby certify that the information above is true and complete to the best of my knowledge and boliof. 1. Thereby certify that the information above is true and complete to the best of my knowledge and boliof. 1. Thereby certify that the information above is true and complete to the best of my knowledge and boliof. 1. Thereby certify the information above is true and complete to the best of my knowledge and boliof. 1. Thereby certify the information and in the information and informa			/=
7. Describe Proposed of Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of attarting any proposed work) SER mule 1793. Operations to re-work commenced with verbal approval from Mr. Runyan on December 7, 1970. 7" casing run and set on old casing at 5100'. Perforated 6494'. Squeezed 75 sx cement. Perforated 6334-40', 6368-74'. Actidized with 2500 gals. Swabbed slight show gas and drilling mud. Squeezed 75 sx at 6334-40. Perforated 6134-40', 6145-51'. Attempted to actidize. Well communicated. Pulled 7" casing. Set 25 sx plug at 5100' and 4990'. Set retainer at 4956'. Perforated 4662-54', 4670-72', 4753-55', 4775-77'. Attempted to actidize. Perforations communicated. Squeezed with 50 sx. Tested perforations. Still communication. Squeezed 150 sx. Drilled out. Perforated 4753-55, 4775-77. Attempted to actidize perforations. Perforations communicated. Perforated 4834-36, 4841-43'. Attempted to actidize. Perforations communicated. Prep. to P&A.		, part	
Operations to re-work commenced with verbal approval from Mr. Runyan on December 7, 1970. 7" casing run and set on old casing at 5100'. Perforated 6494'. Squeezed 75 sx cement. Perforated 6334-40', 6368-74'. Actidized with 2500 gals. Swabbed slight show gas and drilling mud. Squeezed 75 sx at 6334-40. Perforated 6134-40', 6145-51'. Attempted to actidize. Well communicated. Pulled 7" casing. Set 25 sx plug at 5100' and 4990'. Set retainer at 4956'. Perforated 4662-54', 4670-72', 4753-55', 4775-77'. Attempted to actidize. Perforations communicated. Squeezed with 50 sx. Tested perforations. Still communication. Squeezed 150 sx. Drilled out. Perforated 4753-55, 4775-77. Attempted to actidize perforations. Perforations communicated. Perforated 4834-36, 4841-43'. Attempted to actidize. Perforations communicated. Prep. to P&A.		<u>-</u> 1	
Operations to re-work commenced with verbal approval from Mr. Runyan on December 7, 1970. 7" casing run and set on old casing at 5100'. Perforated 6494'. Squeezed 75 sx cement. Perforated 6334-40', 6368-74'. Acidized with 2500 gals. Swabbed slight show gas and drilling mud. Squeezed 75 sx at 6334-40. Perforated 6134-40', 6145-61'. Attempted to acidize. Well communicated. Pulled 7" casing. Set 25 sx plug at 5100' and 4990'. Set retainer at 4956'. Perforated 4662-54', 4670-72', 4753-55', 4775-77'. Attempted to acidize. Perforations communicated. Squeezed with 50 sx. Tested perforations. Still communication. Squeezed 150 sx. Drilled out. Perforated 4753-55, 4775-77. Attempted to acidize perforations. Perforations communicated. Perforated 4834-36, 4841-43'. Attempted to acidize. Perforations communicated. Prep. to P&A. 8.1 hereby certify that the information above is true and complete to the best of my knowledge and belief. Operator DATE 2/11/71	OTHER		
Operations to re-work commenced with verbal approval from Mr. Runyan on December 7, 1970. 7" casing run and set on old casing at 5100'. Perforated 6494'. Squeezed 75 sx cement. Perforated 6334-40', 6368-74'. Acidized with 2500 gals. Swabbed slight show gas and drilling mud. Squeezed 75 sx at 6334-40. Perforated 6134-40', 6145-61'. Attempted to acidize. Well communicated. Pulled 7" casing. Set 25 sx plug at 5100' and 4990'. Set retainer at 4956'. Perforated 4662-54', 4670-72', 4753-55', 4775-77'. Attempted to acidize. Perforations communicated. Squeezed with 50 sx. Tested perforations. Still communication. Squeezed 150 sx. Drilled out. Perforated 4753-55, 4775-77. Attempted to acidize perforations. Perforations communicated. Perforated 4834-36, 4841-43'. Attempted to acidize. Perforations communicated. Prep. to P&A. 8.1 hereby certify that the information above is true and complete to the best of my knowledge and belief. Operator DATE 2/11/71			
1970. 7" casing run and set on old casing at 5100'. Perforated 6494'. Squeezed 75 sx cement. Perforated 6334-40', 6368-74'. Acidized with 2500 gals. Swabbed slight show gas and drilling mud. Squeezed 75 sx at 6334-40. Perforated 6134-40', 6145-51'. Attempted to acidize. Well communicated. Pulled 7" casing. Set 25 sx plug at 5100' and 4990'. Set retainer at 4956'. Perforated 4662-54', 4670-72', 4763-55', 4775-77'. Attempted to acidize. Perforations communitated. Squeezed with 50 sx. Tested perforations. Still communication. Squeezed 150 sx. Drilled out. Perforated 4753-55, 4775-77. Attempted to acidize perforations. Perforations communicated. Perforated 4834-36, 4841-43'. Attempted to acidize. Perforations communicated. Prep. to P&A. 8.1 hereby certify that the information above is true and complete to the best of my knowledge and belief. Title Operator Operator Date 2/11/71		ations (Clearly state all pertinent details, and give pertinent dates, inclu	aing estimated date of starting any proposed
Operator Ope	1970. 7" casing r 75 sx cement. Per slight show gas an 6145-51'. Attempt plug at 5100' and 4753-55', 4775-77' with 50 sx. Teste out. Perforated 4 communicated. Per	run and set on old casing at 5100'. Perfora forated 6334-40', 6368-74'. Acidized with did drilling mud. Squeezed 75 sx at 6334-40. Red to acidize. Well communicated. Pulled 4990'. Set retainer at 4956'. Perforated Attempted to acidize. Perforations communications. Still communication. Squee 1753-55, 4775-77. Attempted to acidize perforated 4834-36, 4841-43'. Attempted to acidize	ted 6494'. Squeezed 2500 gals. Swabbed Perforated 6134-40', 7" casing. Set 25 sx 4662-54', 4670-72', unitated. Squeezed ezed 150 sx. Drilled orations. Perforations
FEB 15 1971	3. I heroby certify that the information ab		DATE 2/11/71
FEE 10 10	() and a	<i>7</i> .)	rose a Will
	Jall XXVIII	The state of the s	FEB 10 Mile
	AND ITIANS OF ACCROSOLS IF ANY:	AT .	

NO. OF COPIES RECEIVED DISTRIBUTION BANTA FE FILE	NEW MEXICO OIL CONSERVATION COMMISSION SEP 9 11 25 6H 265	Form C-103 Supersedes Old C-102 and C-103 Effective 14-65
U.S.G.S.	3Er J 11 23 mi 03	State Fee
OPERATOR		5. State Oil & Gas Lease No.
CI IN	DOV NOTICES AND DEPORTS ON WELLS	E-3435
USE "APPLI	DRY NOTICES AND REPORTS ON WELLS PROPOSALS TO A DIFFERENT RESERVOIR. CATION FOR PERMIT—" (FORM C-101) FOR SUCH PROPOSALS.)	
OIL WELL GAS WELL	OTHER- Plug and Abandon	7. Unit Agreement Name
2. Name of Operator	Oil & Gas Company	8. Form or Lease Name State Lea 405
3. Address of Operator	w 1020 Nabba New Mardan	9. Well No.
4, Location of Well	x 1920, Kobbs, New Mexico	10. Field and Fool, or Wildon
UNIT LETTER	660 FEET PROM THE North LINE AND 1980 FE	EET PROM BOTTON
THE West LINE, SE	TYTON TOWNSHIP LES RANGE 35E	_ нмрм.
mmmmmm	15. Elevation (Show whether DF, RT, GR, etc.)	12. County
	38931 GE	Les
TD 11,783', PBTD 87	Operations (Clearly state all persinent details, and give pertinent dates, in the state of the s	Springs Perfs. 8649-6681' and m of 9-5/8"OD ong @ 4990' and sacks commit in collar.
	,· ·.	
18. I hereby certify that the informati	on above is true and complete to the best of my knowledge and belief.	
STENED CONT.	A superintendent	DATE 9-65
	1111 F	

FILE U.B.G.S. LANG OPE TRANSPIG MRORATIO	01L 0A3 0N OFFICE		MISCELL	ANEOU	\$ REP	ORTS O	COMMISSION WELLS	(Rev 3-55)
Name of C		& Ges Compan		Addre	Ss			New Mexico
Lease		V	ell No. U	ait Letter	Section	Township		Range
	tate Lea 405 Performed	Pool	1	<u> </u>	27	County	56	358
	pelow	South Vac					Lea	
□ Begi	naing Drilling Operat		REPORT OF				Explain):	
Plug			edial Vork	•	`		,	
5-4-		7" casing perforated holes. Ran Acidised por Min Press ? The & Pack well on pure Bone Spring and 44 bbl.	ron brid below by Bone Sy A 2-3/6 erfs 564 2600, in er. Rerv sp.	ridge prings in the 19-81 vate m 2-3/	Zone & pac # pac //3000 1 3.6 /8 * th	Silled 8649-6 ker to gals BPM, 10 g & pac	w/heavy 1 4 & 8688- 8630. soid. Ma: 0 win SII dker to !	x Press 4600, P 3000. Pulled 3605 and placed gravity oil
Vitnessed	by V.R. BL	Bone aprin) AN 5-1	8-62. after	plugg GOR	909 to ing ba	rs on pot 1. Rece ok from t	tential test empleted in the
Vitnessed	by V.R. BL	Bone aprin	Positional W FOR REA	8-62. after MAN	GOR plugg	909 to ing ba	l. Rece l. Rece ck from (tential test empleted in the the Devonian Son
	V.H. BL	ACK FILL IN BELO	Positional Positional Positional Positional Positional Positional	8-62. after	GOR plugg	909 to ing ba	1. Record to the first term of	tential test empleted in the the Devonian Son
F Eley. 389 Tubing Dia 2-	V.R. BL	ACK FILL IN BELO 11783 Tubing Depth 11257	Positional Positional Positional Positional Positional Positional	8-62. after MAN MEDIAL W L WELL D	GOR plugg	909 to ing back BINCL PORTS OA	1. Record to the first term of	cential test capleted in the che Devenian Son R GAS COMPANY Completion Date
F Eley. 389 Tubing Dia 2-	V.R. BL	ACK FILL IN BELO 11783 Tubing Depth 11257	Positional Positional Positional Positional Positional Positional	8-62. after MAN MEDIAL W L WELL D	Pluss pluss ORK RE	909 to ing back BINCL PORTS OA	I. Record to the second to the	cential test capleted in the che Devonian Son R GAS COMPANY Completion Date
	7 P. BL 3 mejer 3/8 Interval(5) 11686-11722	ACK FILL IN BELO 11783 Tubing Depth 11257	Positional Positional Positional Positional Positional Positional	8-62. after MAN MEDIAL W.L. WELL 0 738 PB Oil Strin	Pluss pluss ORK RE	Producing 11686.	I. Record to the second to the	cential test capleted in the che Devenian Son R GAS COMPANY Completion Date
F Elex. 385 Subing Dia 2-3 Perforated	7 P. BL 3 mejer 3/8 Interval(5) 11686-11722	ACK FILL IN BELO 11783 Tubing Depth 11257	Positional Positional Positional Positional Positional Positional	8-62. after MAN MEDIAL WELL D 38PB Oil Strin	ORK REATA	Producing 11686.	I. Record to the second to the	cential test capleted in the che Devenian Son R GAB COMPANY Completion Date Depth 1783
F Elex. 385 Subing Dia 2-3 Perforated	V.R. BL 3 mejer 6/0 Interval Date of Test	ACK FILL IN BELO 11783 Tubing Depth 11257 Oil Production BPD	Positional W FOR REM ORIGINA PBTD 117	S-62. after MAN MEDIAL W L WELL D OIL Strin Producin Producin OF WORK	ORK REATA ORK REATA ORK REATA ORK REATA ORK REATA ORK REATA	Producing 11686.	I. Record to the second to the	cential test capleted in the che Devenian Son R GAB COMPANY Completion Date Depth Gas Well Potential
F Eley. 389 Subing Dia 2-3 Perforated Open Hole	Date of Test Devonite: 2 4/28/62	Pone Spring ACK FILL IN BELO 11783 Tubing Depth 11257 Oil Production BPD	Positional	S-62. after MAN MEDIAL W L WELL D OIL Strin Producin Producin OF WORK	ORK REATA ORK REATA ORK REATA ORK REATA ORK REATA OVER Water Property Billion	909 to ing bac BINCL PORTS OA Producing ilon(s) a	I. Record to the second	cential test capleted in the che Devenian Son R GAB COMPANY Completion Date Depth Gas Well Potential
F Elev. 385 Subing Dia 2-3 Perforated Perforated Test Before	Pate of Test	Pone Spring ACK FILL IN BELO 11783 Tubing Depth 11257 Oil Production BPD	Positional Positional W FOR REM ORIGINA PBTD 117 RESULTS Gas Prod MCF	S-62. after MAN MEDIAL W L WELL D OIL Strin Producin Producin OF WORK	ORK REATA ORK REATA ORK REATA ORK REATA ORK REATA OVER Water Property Billion	Production	I. Received the second	cential test capleted in the che Devonian Son R GAB COMPANY Completion Date Depth Gas Well Potential
Perforated Test Before Workover After	Date of Test Description Date of Test Description Date of Test Description Test Description 5/18/62	Pone Spring ACK FILL IN BELO 11783 Tubing Depth 11257 Oil Production BPD	Positional Positional W FOR REM ORIGINA PBTD 117 RESULTS Gas Prod MCF	8-62. after MAN MEDIAL W L WELL D OIL Strin Products Product	ORK REATA ORK REATA ORK REATA ORK REATA ORK PINNER Water Pinner Blue by certify	909 to ing bac SINCL PORTS OA Producing 11686 er coduction D 000 44	I. Receipt Promise of the Control of	cential test capleted in the che Devenian Son R GAB COMPANY Completion Date Depth Gas Well Potential
Test Before Workover After Workover	Date of Test Date of Test 128/62 Bose Sprin 5/18/62 OIL CONSERV	ACK FILL IN BELCO 11783 Tubing Depth 11257 Oil Production BPD O Zone 92	Positional Positional W FOR REM ORIGINA PBTD 117 RESULTS Gas Prod MCF	8-62. after MAN MEDIAL W L WELL D OIL Strin Producin	ORK REATA ORK REATA ORK REATA ORK REATA ORK PINNER Water Pinner Blue by certify	PORTS OA Producing 11686 er coduction D toduction D toduction D toduction D toduction	I. Receipt Promise of the Control of	Completion Date Completion Date Completion Date Completion Date Completion Date Completion Date Completion Date
F Elev. 385 Subing Dia 2-3 Perforated Pen Hole Test Before Workover After	Date of Test Date of Test 128/62 Bose Sprin 5/18/62 OIL CONSERV	ACK FILL IN BELCO 11783 Tubing Depth 11257 Oil Production BPD O Zone 92	Positional Positional W FOR REM ORIGINA PBTD 117 RESULTS Gas Prod MCF	8-62. after MAN MEDIAL W L WELL D OIL Strin Products Product	ORK REATA ORK REATA	Production PD	I. Receipt Promise of the Control of	Completion Date Completion Date Completion Date Completion Date Completion Date Completion Date Completion Date

Origazce: OCC; ce:HFD,JM,File.

SANTA FE FILE U.S.O.S. LAND OFFICE THANGOTE AROMATION OPERATOR	91L 945			NISCELL	ANEDU	IS REPO	DRTS O	N WELLS	CFF105 1106)	•
Name of Co	npany	M3 4	k Gas Com	- 4 G-G-	Addre		Dwa	Tab	R	55
Lease					nit Letter	Section	Township	adway, Hob	Range	
	tate Lea		ool	1	<u>C</u>	27	County	88	35	<u> </u>
Date Work P	enoused	ľ	South	Vacuum D		NA.	iee			
, , , , , , , , , , , , , , , , , , ,	. 5.32. 6	•		A REPORT OF				Post as to		,
Beginn Pluggi	ing Drilling Ope	TECLODE		sing Test and C medial Work	ewent jor	• L	Otner (z	Explain):		
		De. Ostu	re and quantity		d, and res	ulta obtair	ned.			
4-15-	62 Pulled		n restan	198 bbls	TOLER	IPTOB 1	IBVER (
4-23-	62 Pumped 62 On 24 fernat in pre	hr p ion pari	, ran the bils for the forest the forest tential water and mg to plu	rmation (test end: no cil, g kukuwa	ter wi ster a rater ing 6: no sh g back	th cas and no and no oo AM low gas to Bo	sing provide a series of the s	mp to 50 62, pumpe al Repor rings Zon	d 1200 t. Wei	bbls Ll shut
4-23- 4-28-	62 Pumped 62 On 24 format in pre	hr p ion pari	, ran the bils for the state of	reation view endi	ter witter a rater ing 6: mo sh r back	th can and no and no iov gas to Bo	ing pi wil. oil. 4-28-(i. Fi one Spi	mp to 50 52, pumpe al Reper rings Zon plair Oil	d 1200 t. Wei	bbls Ll shut
4-23- 4-28- Witnessed by	62 Pumped 62 On 24 fermat in pre V.R. Bl	hr p ion pari	, ran the bils for the state of	rmation (test end: no cil, g kukuwa	ter winter enter ling 6: no she pack	th can and no and no iov gas to Bo	ing pi wil. oil. 4-28-(i. Fi one Spi	mp to 50 52, pumpe al Reper rings Zon plair Oil	d 1200 t. Wei	bbls Ll shut
4-23- 4-28- Witnessed by	62 Pumped 62 On 24 fermat in pre V.R. Bl	hr point	, ran the bils for the state of	Position Formal ORIGINAL PRED	ter winter enter ling 6: no she pack	ich cas and no and no co AM low gas to Bo	ing pi wii. oil. 4-28-(Fine Spi ompany ompany PORTS Of	mp to 50 52. pumperal Reperings Zon clair Oil VLY	d 1200 t. Wei	bbis il shut Co.
4-23-4-28- Witnessed by D F Elev. 38 Tubing Dism	62 Pumped 62 On 24 fermat in pre V.R. Bl	hr prince inch	bbls for bbls for bbls for otential water and ng to plu	Position Formal ORIGINAL PRED	ter winter erater ing 6: no she ke back	ich cas and no and no co AM low gas to Bo	eing pi eil. 4-28-(- Fi ome Spi ompany PORTS Of	2. pumperal Reportings Zon	d 1200 t. We.	bbis il shut Co.
4-23-4-28- Witnessed by D F Elev.	62 Pumped 62 On 24 fermatin pre V.R. Bl	120 hr pion	bble for bble for bble for otential water and ng to plus fill the BEL 1783	Position Formal ORIGINAL PRED	ter winter erater ing 6: no she ke back	CORK REI	eing pi eil. 4-28-(- Fi ome Spi ompany PORTS Of	2. pumperal Reportings Zon plair Gil VLY Interval 7-11781	d 1200 t. We.	bbis il shut Co.
Witnessed by D F Elev. 38 Tubing Diam 2-3/ Perforated In	62 Pumped 62 On 24 formatin pre V.R. Bl	hr pilon pari	bbls for bbls for bbls for otential water and ng to plu	Position Formal ORIGINAL PRED	ter winter a rater ing 6: no she con the control of	CORK REI	eing pi eil. 4-28-(- Fi ome Spi ompany Since PORTS Of Producing 1169	2. pumperal Reportings Zon plair Gil VLY Interval 7-11781	d 1200 t. We.	bbis il shut Co.
Witnessed by D F Elev. 38 Tubing Diam 2-3/ Perforated In	62 Pumped 62 On 24 formatin pre V.R. Bl	120 hr pion	bble for bble for bble for otential water and ng to plus fill the BEL 1783	Position Formal ORIGINAL PRED	ter winter a rater ing 6: no she rater ing 6:	ORK REI	eing pi eil. 4-28-(- Fi ome Spi ompany Since PORTS Of Producing 1169	2. pumperal Reportings Zon plair Gil VLY Interval 7-11781	d 1200 t. We.	bbis il shut Co.
Witnessed by D F Elev. 38 Tubing Diam. 2-3/	62 Pumped 62 On 24 formatin pre V.R. Bl	hr pilon pari	bble for bble for bble for otential water and ng to plus fill the BEL 1783	Position Formation of the Position Posi	ter witter a rater ing 6: no shi ke	ORK REI	one Sprompage 1169 Producing 1169 coduction	2. pumperal Reportings Zon plair Gil VLY Interval 7-11781	d 1200 t. Well Complete 6/5	bbis il shut Co.
Witnessed by D F Elev. 38 Tubing Diam 2-3/ Perforated Into	62 Pumped 62 On 24 format in pre V.R. Bl 93 cter 8 terval(s) terval	hr pilon pari	bbls for bbls fill in Bel bbls bbls bbls bbls bbls bbls bbls bb	Position For REM ORIGINAL PBTD 1:	ter winter a rater ing 6: no shift ing 6: no s	OO AM CONTROL OF THE PROPERTY	eing pi eil. 4-28-(- Fil ompany ompa	2. pumperal Reportings Zon clair Oil vLy Interval 7-11781 Oil String	d 1200 t. Well Complete 6/5	bbls Ll shut Co.
Witnessed by D F Elev. 38 Tubing Diam 2-3/ Perforated Int Test Before	62 Pumped 62 On 24 format in pre V.R. Bl 93 eter 8 terval(s) terval Date of Test	ack TD 1 1176	bble for bble for bble for bble for bble for bble for cential water and ng to plus fill IN BEL 1783 bing Depth 11257 9-11774 Oil Production BPD	Position Form ORIGINAL PBTD RESULTS (Gas Prode	ter winter a rater ing 6: no shift ing 6: no s	ORK REI	eil. 4-28-(- Yil) ompany ompa	mp to 50 52. pumperal Reperrings Zon clair Cil VLY Interval 7-11781 Oil String Cubic feet/Bi	d 1200 t. Well Complete 6/5	bbls Ll shut Co.
Witnessed by D F Elev. 38 Tubing Diame 2-3/ Perforated Int Test Before Workover After	62 Prespect 62 On 24 format in pre V.R. Bl 93 cter 8 torval(s) terval Date of Test 4-1-6 4/28/	120 hr printer particular particu	bbls for bbls for bbls for bbls for bbls for bbls for otential water and ng to plus fill IN BEL 1783 bing Depth 11257 9-11774 Oil Production BPD	Position to the continuous contin	ter witter a reter ing 6: no ship in	ICO AME ION GALL ION	PORTS OF	ings Zon clair Oil vLy Interval 7-11781 Oil String Cubic feet/Bl TSTM O	d 1200 t. We.	Co. Co. Fell Potential CFPD
Vitnessed by D F Elev. 38 Tubing Diame 2-3/ Perforated Int Test Before Workover After Workover	62 Prespect 62 On 24 format in pre V.R. Bl 93 cter 8 torval(s) terval Date of Test 4-1-6 4/28/	120 hr printer particular particu	bbls for bbl	Position to the continuous contin	ter witter a reter ing 6: no ship in	OVER Water Pro BP 22 120	PORTS OF	ings Zon clair Oil vLy Interval 7-11781 Oil String Cubic feet/Bl TSTM O	d 1200 t. We.	Co. Co. Fell Potential CFPD
Witnessed by D F Elev. 38 Tubing Diame 2-3/ Perforated Int Test Before Workover After	62 Prespect 62 On 24 format in pre V.R. Bl 93 cter 8 torval(s) terval Date of Test 4-1-6 4/28/	120 hr printer particular particu	bbls for bbl	Position to the continuous contin	er witter witter a constant of work well of the constant of th	OVER Water Pro BP 22 120 by certify best of my	PORTS OF	mp to 50 2. pumperal Reportant Reportant Control Strings Zon Control Control Control Control Control Strings Zon Cubic feet/Bl Cubic feet/Bl Cubic feet/Bl Cubic feet/Bl	d 1200 t. We.	Co. Co. Fell Potential CFPD

Origades: OCC; cc:HFD,JM,File

10 Sx. surface plug 12 1/4" Hole; 8 5/8" csg. set @ 458' Cemented w/300 sx. Cement circulated to surface Perforated @ 592' & squeezed w/250 sx. Cement circulated to surface. TOC @ 595' by T.S. 7 7/8" Hole. Set 5 1/2" Csg. @ 1,885' Cemented w/450 Sx. TOC @ 595' by T.S. Set 60 Sx. cement plug 3,024'-3,124' Set 50 Sx. cement plug 4,370'-4,470' Set 40 Sx. cement plug 4,950'-5,050' Drilled 7 7/8" Hole to T.D. @ 5,590'

Reeves State No. 1 API No. 30-025-30550 330' FNL & 660' FWL, Unit D Section 27, T-18S, R-35E Type Well: Dry Hole **Drilled:** 3/89 Plugged: 4/89

Hondo Oil & Gas Co.

Submit 3 Capies to Appropriate District Office	State of New Me Energy,inerals and Natural Re		Form C-103 Revised 1-1-89
DISTRICT P.O. Box 1980, Hobbs, NM 88240	OIL CONSERVATIO		WELL API NO.
DISTRICT II	P.O. Box 208		30-025-30530
P.O. Drawer DD, Artesia, NM 88210	Santa Fe, New Mexico	8/304-2088	5. Indicate Type of Lease STATE X FEE
DISTRICT III 1000 Rio Brazon Rd., Aziec, NM 87410		•	6. State Oil & Gus Lease No.
TON VEGNUE	ICES AND REPORTS ON WEL	18	\bar{\bar{\bar{\bar{\bar{\bar{\bar{\bar
(DO NOT USE THIS FORM FOR PRODIFFERENT RESE	OPOSALS TO DRILL OR TO DEEPEN RVOIR. USE "APPLICATION FOR PEI 1-101) FOR SUCH PROPOSALS.)	OR PLUG BACK TO A	7. Lease Name or Unit Agreement Name
1. Type of Well: od. GAS WELL X WELL	ा		Reeves State
2. Name of Operator	UREA		8. Well No.
Hondo Oil & Gas Com	pany		1
3. Address of Operator			9. Pool name or Wildcat
P. O. Box 2208, Ros	well, NM 88202		Reeves Queen
Unit LetterD :33	Township 185 Re	DF, RKB, RT, GR, etc.) 04' GR	NMFM Lea County
NOTICE OF IN	Appropriate Box to Indicate I FENTION TO:		eport, or Other Data SEQUENT REPORT OF:
PERFORM REMEDIAL WORK	PLUG AND ABANDON	REMEDIAL WORK	ALTERING CASING
TEMPORARILY ABANDON	CHANGE PLANS	COMMENCE DRILLING	OPNS. PLUG AND ABANDONMENT
PULL OR ALTER CASING		CASING TEST AND CE	MENT JOB
OTHER:		OTHER: Plugge	d back & ran casing X
### SEE RULE 1103. Drilled 7 7/8" Class "C" plug 4470-4370'. Sp 5 1/2" 17# Lt&C Set ECP @ 1786' other joint. C Plug down @ 12:	hole to 5590' (TD). R from 5050-4950'. Spot potted 60 sx. cement pl C J-55 casing. Float s '. DV tool @ 1778' (PB Cement with 350 sx. Cla 30 p.m. 4/5/89. Cemen e survey. TOC @ 595'.	eached TD 4/4/8 ted 50 sx. Clas ug from 3124-30 hoe @ 1885'. S TD). Ran 15 ce ss "C" w/2% CC	s "C" plug from 24'. Ran 43 jts. et ECP @ 1837'. ntralizers, every + 100 sx. Thixset.
,			

CONDITIONS OF APPROVAL, IF ANY:

TYPE OR TRUNT NAME

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

(This space for State Use)
ORIGINAL SIGNED BY JERRY SEXTON

mns Petroleum Engineer

_ DATE _4/13/89_

APR 1 8 1989

TELEPTIONE NO.

I.			1_
Submit 3 Copies to Appropriate District Office		New Mexico atural Resources Department	Form C-103 Revised 1-1-89
DISTRICTA	OIL CONSERV.	ATION DIVISION	
P.O. Box 1980, Hobbs, NM 88240	P.O. I	Box 2088	WELL API NO. 30-025-30532
DISTRICT II P.O. Drawer DD, Artesia, NM 88210	Santa Fe, New N	fexico 87504-2088	5. Indicate Type of Lease STATE K FEE
DISTRICT III 1000 Rio Brazos Rd., Azteo, NM 87410			6. State Oil & Gas Lesso No.
SUNDRY NOT	ICES AND REPORTS C	N WELLS	E-1635
(DO NOT USE THIS FORM FOR PRODIFFERENT RESER		DEEPEN OR PLUG BACK TO A POR PERMIT	7. Lease Name or Unit Agreement Name
I. Type of Well:			1
MEIT X MBIT	जास्त्र		Reeves State
2. Name of Operator			B. Weil No.
Hondo Oil & Gas Compa 3. Address of Operator	iny		9. Pool game or Wildcat
P. O. Box 2208, Roswe	11. NM 88202		Reeves Oueen
4. Well Location			Neeves Odeen
Unit Letter D :330	Poet From The NO	rth Line and 660	Peet From The West Line
Section 27	Township 18S	Range 35E	NMPM Lea County
	10. Elevation (Show	whether DF, RKB, RT, GR, etc.) 3904 t GR	
<i>xuuuuuuuuuuuuu</i>	(////)		Y/////////////////////////////////////
	•••	licate Nature of Notice, Re	
NOTICE OF INT	ENTION TO:	SUB	SEQUENT REPORT OF:
PERFORM REMEDIAL WORK	PLUG AND ABANDON	REMEDIAL WORK	ALTERING CASING
TEMPOPARILY ABANDON	CHANGE PLANS	COMMENCE DRILLING	OPNS. PLUG AND ABANDONMENT
PULL OR ALTER CASING		CASING TEST AND CE	MENT JOB O
OTHER:		OTHER:	
12. Describe Proposed or Completed Opers work) SEE RULE 1103.	tions (Clearly state all pertinent o	details, and give persinent dates, inclu	ding estimated date of starting any proposed
Cla		§ 592'. Squeezed wit rculated 10 sx. to su marker.	
		,	•
	,		
I hereby certify that the juformation above is true	s and complete to the best of my know	riedge sad bellof.	
SIGNATURE E. J. Ballin	•		ngineer DATE 4/21/89
AMILIANDE TO THE PARTY OF THE P			

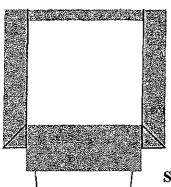
(This space for Sista Use)

APTROVED BY

OIL'& GAS INSPECTOR

JUL 2 1 1989

CONDITIONS OF AFFROYAL, IF ARY:



10 Sx. surface plug

Oxy USA, Inc.
State EA No. 1
API No. 30-025-30315
330' FNL & 2310' FWL, Unit C
Section 28, T-18S, R-35E
Type Well: Dry Hole

12 1/4" Hole; 8 5/8" csg. set @ 378'

Cemented w/275 sx.

Cement circulated to surface

Drilled:

4/88

Plugged:

4/88

Set 27 Sx. cement plug 328'-428'

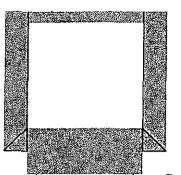
Set 26 Sx. cement plug 1,800'-1,900' (Top of Salt)

Set 26 Sx. cement plug 3,100'-3,200' (Base of Salt)

Set 26 Sx. cement plug 4,416'-4,516'

Drilled 7 7/8" Hole to T.D. @ 4,780'

7.14.		OIL & GAS INSTEC	TOU. NATE 7-13-00
· 1// /	Ardni	Dist. Oper. Mgr P	rod. pars 4-13-88
i, i nerecy certify that t	he information :	wove is leve and complete to the best of my knowledge and belief.	•
· · · · · · · · · · · · · · · · · · ·			
		· •	
			•
Set a 4"	Dry Hole I	Marker 4' above ground to designate P & A	location
			•
4.	Set 27 sx	.CL. C cement plug @ 428'- 328' 1/2 in & CL. C cement plug @ 30' to surface.	
		. CL. C cement plug @ 3200'-3100' across b . CL. C cement plug @ 1900'-1800' across t	
1:	Set 26 sx	. CL. C cement plug @ 4516'-4416' across Q	Queen
to T.D. o	£ 4780' i	n Lime & Dolomite and after receiving verb obbs, NM, this well was P & A'd in the fol	pal approval from Jerry
T.D. of 4	780' Lime	& Dolomite. Plugged and abandoned. Drill	led a 7 7/8" hole from 378' -
7. Describe Processes of work) SEE AULE 11	r Completed Opi	ecctions (Crearly state all persinent details, and give pertinent dates,	including estimated date of starting any proposed
51HER		<u> </u>	
		OTHER	
TEMPORARILY ABANDON PULL OR ALTER CASING		CHANCE PLANS CASING TEST AND CEMENT JOS	PLUG AND ABANDOHMENT X
PERFORM REMEDIAL WORK	· 📙	PLUG AND ADAMOUN	ALTERING CASING
NO	PICE OF IN	TENTION TO: SUBS	EQUENT REPORT OF:
.6.		appropriate Box To Indicate Nature of Notice, Report	
		3915.6 GR	Lea ()
mmmm		15. Elevation (Show whether DF, RT, GR, etc.)	12, County
THE West	LINE, SCCT10	N 28 TOWNSHIP 185 MARGE 35E	
UNST LETTER	<u> </u>	30 FEET FROM THE North LINE AND 2310	Reeves (Queen).
L. Locusion of Well			16. Theis and Pool, or Arigost
	x 50250. M	idland, TX 79710	1
OXY USA	Inc.		State EA
. Numa of Chesalos			d, r arm or Lease Name
::::::::::::::::::::::::::::::::::::	SAS.	DTMKBo	7, Unix Agricument Frame
	2000 A 440 A	Y NOTICES AND REPORTS ON WELLS CONTROL OF THE CONTROL OF THE POST	
·	COUNT	V NOTICES AND DEDOCTS ON WELLS	A 4096
OPERATOR			2. Livie (1, 6 was Lease No.
U.S.G.S. LAND OFFICE			State Fee
FILE			
SANTA FE		NEW MEXICO OIL CONSERVATION COMMISSION	C-102 and C-103 Elicative (-1-65
DISTRIBUTION		-	Form C-103 Supersedez Old



10 Sx. surface plug

Leatherwood Drilling Co.
Atlantic State No. 1
API No. 30-025-23480
330' FSL & 330' FWL, Unit M
Section 22, T-18S, R-35E
Type Well: Dry Hole

12" Hole; 8 5/8" csg. set @ 378'

Cemented w/275 sx.

Cement circulated to surface

Drilled: 4/70

Plugged: 4/70

Set 25 Sx. cement plug 350'-475'

Set 25 Sx. cement plug 1,800'-1,925' (Top of Salt)

Set 25 Sx. cement plug 2,850'-2,975' (Base of Salt)

Set 25 Sx. cement plug 4,850'-4,975'

Drilled 6 3/4" Hole to T.D. @ 4,975'

			- C		
NO. OF COPIES RECEIVED				Form C - 103	
DISTRIBUTION				Supersedes Old	
SANTA FE	NI NI	EW MEXICO OIL CONSERVAT	TON COMMISSION	C-102 and C-103 Effective 14-65	
FILE					
U.S.G.S.				5a. Indicate Type of	Loase
LAND OFFICE				State 🔨	Fed.
OPERATOR				5. State Oil & Gas 1.	ease No.
ĊII	NIDDY NOTICES	AND DEDODTS ON WEST	e	mmmm ⁻	mmm.
OD HOT USE THIS FORM FO USE TAPE	A PROPOSALS TO GRILLICATION FOR PERMIT	AND REPORTS ON WELL	BIFFERENT RESERVOIR.		
OIL AND WELL	OTHER-			7. Unit Agreement No	me
2. Name of Operator LEATHE	RWOOD DRILLIN	NG CO.		8. Form or Lease Nor Atlantic-Sta	ite
3. Address of Operator P.O. Bi	X 1352 ROSk	WELL, NEW MEXICO		9. Well No.	
4. Location of Well WHIT LETTER	330	West	330	10. Field and Pgol, o	
		18 S	35 E		IIIIIII.
THE South LINE, 5	ECTION	TOWNSHIPR	ANGE HM	HHHHHh.»	illillilli.
mmmm	mmm.	Elevation (Show whether DF, RT,	CD ata :	12, County	HHHH
		3901.9 G.L.	on, esc.)	Lea	
Cho	ch Appropriate	Box To Indicate Nature	of Norine Report of C	Ither Doro	7777777
	F INTENTION TO		•	NT REPORT OF:	
			<u></u>		
PERFORM REMEDIAL WORK	•	PLUG AND ABANDON REMEQ	AL WORK	ALTERING C	EASING QUICA
TEMPORARILY ABANDON		COMME	NCE BRILLING OPHS,	PLUG AND A	THEMRODIAN
FULL OR ALYER CASING		CHANGE PLANS CASING	TEST AND CEMENT JOB		
		ОТН	ER		
OT KER					
17, Describe Proposed or Complete	d Operations (Clear)	ly state all pertinent details, and	eive pertinent dates, includi	ne estimated date of starti	ing any proposed
work) SEE RULE 1 103.					
		omite. Well plugged	and abandoned on	verbal permissi	on
· **	Ir.Joe Ramey	as TOTIONS:			
o	E eu alua A	IOTE AREA			
2	25 sx. plug 4 25 sx. plug 2	2850 - 2975 Base of	Salt		
2	5 sx. plug 2	800 - 1925 Top of			
ž	5 sx. plug r	350 - 475 8-5/8"	Surface casing		
ī	Osx. plug a	t surface			
	, •				
Drilling m	ud spotted b	etween plugs.Dry Ho	le marker erected	.Waiting on pits	i ·
		and cleaning locati	ion.W111 advise w	nen location is	•
ready for	inspection.				
		·			
8, I hereby certify that the informat	lon shove is true an	d complete to the best of my know	viodge and beltof.		·····
5/16	9 —				
IGHED MB. MC-C	m	TITLE Agent		DATE 4-27-70	
	4				
(1.11 U.			r.A	, , 1	<i>5</i> 1970
PARAVED BY W.	/ curso	TITLE Geolog	727	DATE	
DUDITION OF APPROVAL, IF A	NY:				



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the
POD suffix indicates the
POD has been replaced
& no longer serves a
water right file.)

(R=POD has been replaced, O=orphaned,

C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	POD Code Subbasin	County	Q Q 0	ົ ເSecັ	Tws	Rng	x	, %, Y	Depth D	epth W	ater lumn
L 03772	L	LE	2 2	2 21	185	35E	644659	3623361*	130	60	70
L 03866	L	LE	3 3	3 22	185	35E	645082	3622155*	127	65	62
L 04399	L	LE	3 3	3 22	18S	35E	645082	3622155*	90	75	15
L 05810	L	LΕ	2 3	3 22	185	35E	645479	3622564*	145	95	50
							Avera	ge Depth to	Water:	73 fee	t
								Minimum	Depth:	60 fee	t

Maximum Depth:

95 feet

Record Count: 4

PLSS Search:

Section(s): 20-22

Township: 18S

Range: 35E

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the
POD suffix indicates the
POD has been replaced
& no longer serves a
water right file.)

(R=POD has been replaced,

O=orphaned, C=the file is

closed)

s (quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	POD Code Subbasin	County	G Q 64 16	Q 4 Sec	Tws	Ŕng	3 X	Y	Depth D	epth V Vater Co	Vater olumn
L 03783	L	LE		27	185	35E	645710	3621138*	115	65	50
L 03963	Ł	LE	1 :	2 27	185	35E	645896	3621762*	127	70	57
L 04562	L	LE	3	1 29	185	35E	641874	3621315*	156	95	61
							Avera	age Depth to	Water:	76 fee	et

Average Depth to Water: 76 feet

Minimum Depth: 65 feet

Maximum Depth: 95 feet

Record Count: 3

PLSS Search:

Section(s): 27-29

Township: 18S

Range: 35E

^{*}UTM location was derived from PLSS - see Help



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a

(R=POD has been replaced,

O=orphaned, C=the file is

(quarters are 1=NW 2=NE 3=SW 4=SE)

4 3 3 34 18S 35E

closed)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number

water right file.)

ROD Code Subbasin County 64 16 4 Sec Tws Rng. Depth Depth Water Y Well Water Column

L 07129

645237 3618830* Average Depth to Water:

40 feet

Minimum Depth:

40 feet

Maximum Depth:

40 feet

Record Count: 1

PLSS Search:

Section(s): 33-34

Township: 18S

Range: 35E

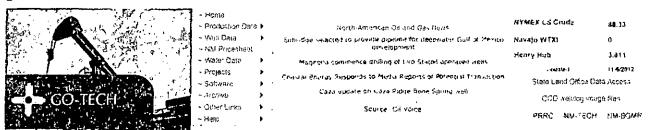
*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

10/10/12 1:09 PM

Page 1 of 1

WATER COLUMN/ AVERAGE DEPTH TO WATER



-- Home>>~ Water Data>>Ground Water

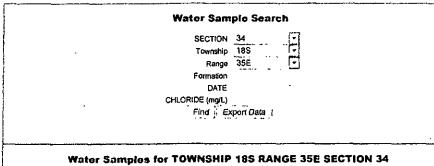
☐ NM WAIDS
☐ Data
☐ Produced Water
☐ Ground Water
☐ Conversion Tools
☐ Scale
☐ Scale details
☐ Stiff
☐ Oddo
☐ Probable Mineral Composition
☐ mix
☐ Corrosion
☐ Theory
☐ Uniform

Stiff
Oddo
Probable Mineral Composition
mix

Theory
Uniform
Galvanic
Crevice
Hydrogen Damage
EIC
Erosion
Equipment
Artificial
Casing and Tubing
Surface
Enhanced
That Gases
O2
CO2
H2S
Microbes

-Prevention
References
Maps
S Trend Maps
GW
PW
Geology
PLSS
Help
- Online Map

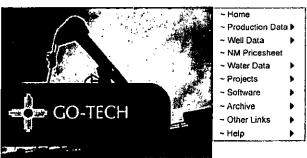
Ground Water Samples Query



Operation # of samples S T R Location (qtr/qtr) select 4 34 18S 35E 18S 35E.34.43143

Operation	SampleID	Township	Rang18	S.355.	34.431 43	Location	Date	Chioridas
select	5940	165	35€	34	OGALLALA	18S 35E 34 43143	12/5/1979	16
26(60)	5331	· 18S	35E	34	OGALLALA	18S 35E.34 43143	11/9/1984	27
select	5174	18\$	35E	34	OGALLALA	185.35E.34 43143	6/7/1990	60
select	3939	188	35E	34	OGALLALA	18S 35E.34 43143	9/7/1995	31

PETROLEUM RECOVERY RESEARCH CENTER SOCORRO NM-87801



North American Oil and Gas News Bonterra Energy and Spartan Oil complete business combination

JKX Oil & Gas announces offering of convertible bonds

The independent members of the SandRidge Energy Board of Directors respond to related party allegations

Halliburton announces fourth quarter income from continuing operations of \$0.63 per diluted share

Source: Oil Voice

NYMEX t.S Crude 96.24

Navajo WTXI 0

Henry Hub 3.418

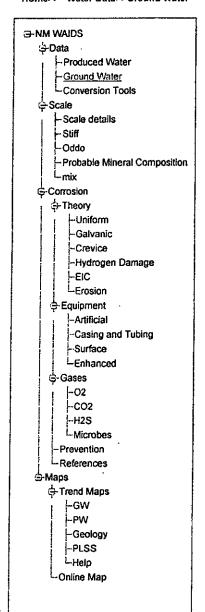
Updated: 1/24/2013

State Land Office Data Access

OCD well/log image files

PRRC NM-TECH NM-BGMR

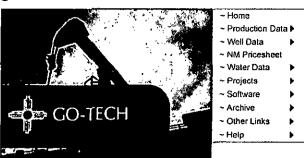
~ Home>>~ Water Data>>Ground Water



Ground Water Samples Query

			W	ater S	am	ple	Sea	rch			
				SECTI	ON			<u> </u>			
				Towns	•	185		뎔			
					-	35E					
				Format	tion NTE						
			CHLOR	RIDE (mg		-					
				Find	E	cport	Data	0			
			1	Nater	Sar	nple	es fo	or			
		Operation	n #ofsa	mples	S	T	R	Location (qtr/qtr)		
		select	•	1	11	18\$	35E	18S.35E.11.3332	2		
		select		1	11	185	35E	18S,35E.11.3444	4		
		select	•	4	16	185	35E	18S.35E.16.1222	3		
		select	•	1	18	185	35E	18S.35E.18.1111	3		
		select	3		21	185	35E	18S.35E.21.2100)		
		1234									
Water Sa	mples fo	r Townsh	ip 18S	RANG	E 3	5E :	Sec	tion 16 Locati	on 18S.3	5E.16.1222	3
Operation	SampleID	Township	Range	Section	Fo	rmat	ion	Location	Date	Chlorides	
select	6383	18S	35E	16	00			18S.35E.16.12223	12/6/1979	18	
select	5788	185	35E	18	OG			18S.35E.16.12223	11/9/1984	28	
select	4903	185	35E	16	QQ			18S.35E.16,12223	6/7/1990	54	
select	4246	18S	35E	16	OG	ALL	ALA	18S.35E.16.12223	9/18/1995	31	
-											

PETROLEUM RECOVERY RESEARCH CENTER, SOCORRO, NM-87801



- Home>>- Water Data>>Ground Water

North American Oil and Gas News

Bonterra Energy and Spartan Oil complete business combination

JKX Oil & Gas announces offering of convertible bonds

The independent members of the SandRidge Energy Board of Directors respond to related party allegations

Halliburton announces fourth quarter income from continuing

Navajo WTXI

Henry Hub

State Le

operations of \$0.63 per diluted share Source: Oil Voice NYMEX LS Crude 96.24

Navajo WTXI 0

Henry Hub 3.418

Updated: 1/24/2013

State Land Office Data Access

OCD well/log image files

PRRC NM-TECH NM-BGMR

⊕NM WAIDS Ġ-Data -Produced Water -Ground Water LConversion Tools Scale details Stiff -Oddo -Probable Mineral Composition <u>L</u>mix **⇔**Corrosion † Theory -Uniform -Galvanic -Crevice -Hydrogen Damage -EIC -Erosion ⇒ Equipment -- Artificial -Casing and Tubing -Surface L-Enhanced G-Gases -02 -C02 -H2S L-Microbes Prevention -References → Trend Maps -GW -PW -Geology -PLSS -Help Online Map

Ground Water Samples Query

			V	Vater S	Sar	nple	Sea	arch		
				SECT	ION	1				
				Town	ship	18	S	Ū		
				Ra	nge	35	E			
				Forma						
			CHLC	.U DRIDE (m	ATE	_				
,			Crice	Find	· —	Expoi	t Dat	ta		
				<u> </u>	نت ا					
				Water	Sa	ampl	les f	for		
		Operation	#ofs	amples	\$	T	R	Location (qtr/q	tr)	
		select		1	28	185	35E	18S.35E.26.113	30	
		select		5	28	18\$	35E	18\$.35E.28.322	:10	
		select		4	31	18\$	35E	18S.35E.31.1421	13A	
		select		1	33	185	35€	18S.35E.33.214	44	
		select		4	34	18\$	35E	18S.35E.34.431	43	
		1234								
		·- -	-t 404							
	SampleS TO SampleID		•					tion 28 Locat		
select	6629	18S	35E						Date	Chlorides
				28	_			18S.35E.28.32210		
select	6222	18\$	35E	28				18S.35E.28.32210		18
select	5530	185	35E	28				18S.35E.28.32210		24
select	4734	18\$	35E	28				18S.35E.28.32210		52
select	3665	185	35E	28	O	GALL	ALA	18S.35E.28.32210	9/29/1995	24

PETROLEUM RECOVERY RESEARCH CENTER, SOCORRO, NM-87801



December 19, 2012

KYLE PAXTON

SUNDOWN ENERGY

P. O. BOX 277

WICKETT, TX 79788

RE: REEVES QUEEN WATERFLOOD UNIT

Enclosed are the results of analyses for samples received by the laboratory on 11/20/12 11:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list on accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab accredited certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celey & Keens

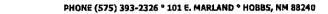
This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

Page 1 of 14



Reported:

20-Nov-12 11:10

20-Nov-12 11:10

19-Dec-12 15:56



H202825-02

Water

Water

Analytical Results For:

SUNDOWN ENERGY

P. O. BOX 277 WICKETT TX, 79788

LEA 403 STATE #2

COMP OF S VACUUM & LEAH202825-03

Project: REEVES QUEEN WATERFLOOD UN!

20-Nov-12 00:00

20-Nov-12 00:00

Project Number: NOT GIVEN

Project Manager: KYLE PAXTON

Fax To: NOT GIVEN

<u> </u>				
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SOUTH VACUUM #5	H202825-01	Water	16-Nov-12 00:00	20-Nov-12 11:10

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Lightly and Damages. Continuit's bability and client's exclusive remedy for any claim arising, whether based in contract or tone, shall be limited to the amount paid by client for enabytics. All claims, including those for negatives any client cause velociated in the properties are not only to the amount paid by client with their (20) days effor completion of the applicable service. In no event shall Cardinal be Rable for modernial or consequential claimsysts including, welface limitation, business intermediates, loss of use, or loss of prefax including and including, welface including and of or related to the performance of the services intermediately claims in the performance of the services in the service in the wide velociate page and or related to the performance of the services intermediately claims in the performance of the services in the service in the wide velociate page and or related to the performance of the services intermediately claims in the performance of the services in the service in the wide velociate page and or related to the performance of the services in the service in the

Celeg & Keena

Celey D. Keene, Lab Director/Quality Manager

Page 2 of 14





SUNDOWN ENERGY

Project: REEVES QUEEN WATERFLOOD UNI

Reported:

P. O. BOX 277 WICKETT TX, 79788 Project Number: NOT GIVEN

19-Dec-12 15:56

Project Manager: KYLE PAXTON

Fax To: NOT GIVEN

SOUTH VACUUM #5 H202825-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardin	al Laborat	ories					
Inorganic Compounds							·		·············
Alkalinity, Blearbonate	34.2	5.00	mu/L	J	2110104	HM	26-Nov-12	310.1	
Calcium	3090	1.60	mg/L	1	2101718	НМ	30-Nov-12	SM3500Ca- D	
Alkalinity, Carbonate	ND	0,00	mg/L	1	2110104	HM	26-Nov-12	310.1	
Chloride*	13800	4.00	mg/L	1	2112104	HM	26-Nov-12	4500-C1-B	
Conductivity*	40300	1.00	uS/cm	ı	2112607	HM	26-Nov-12	120.1	
Magnesium	899	1.00	mg/L	1	2101718	нм	30-Nov-12	SM3500Mg- E	
pH*	6.11	001.0	pH Units	ı	2112607	НМ	26-Nov-12	150.1	
Potassium	185	1.00	mg/L	1	2101718	HM	30-Nov-12	HACH 8049	
Sodium	3730	1.00	mg/L	ı	2101718	НМ	30-Nov-12	Calculation	
Sulfate*	293	10.0	mg/L	1	2112703	AP	27-Nov-12	375.4	
TDS*	23300	5.00	mg/L	ı	2112602	HM	21-Nov-12	160.1	
Alkalinity, Total*	28.0	4.00	mg/L	1	2110104	HM	26-Nov-12	310.1	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Lightly and Cournages, Cardonal's Bability and client's exclusive remody for any client arrang, whether based in contract or tort, shall be limited to this amount paid by client for analyses. All claims, including from line remody for any client arrange, without client washington of the applicable service. In no event shall Cardonal be fittle for incidental or consequential duringes, including, without amountain, business incompleton, loss of product incompleton, loss of product incompleton. The substitute is a substitute, the product incompleton of the professionance of the services hereafted or the services

Celeg & Keene

Celey D. Keene, Lab Director/Quality Manager

Page 3 of 14





SUNDOWN ENERGY

Project: REEVES QUEEN WATERFLOOD UN:

Reported:

P. O. BOX 277 WICKETT TX, 79788 Project Number: NOT GIVEN

19-Dec-12 15:56

Project Manager: KYLE PAXTON

Fax To: NOT GIVEN

LEA 403 STATE #2 H202825-02 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Anatyzed	Method	Notes
		Cardin	al Laborat	ories					
Inorganic Compounds									
Alkalinity, Bicarbonate	503	5.00	mg/L	i	2110104	HM	26-Nov-12	310.1	
Calcium	2480	1.60	mg/L	ı	2101718	HM	30-Nov-12	SM3500Ca- D	
Alkalinity, Carbonate	ND	0.00	mg/L	1	2110104	HM	26-Nov-12	310.1	
Chloride*	19400	4.00	mg/L	Į.	2112104	HM	26-Nov-12	4500-CI-B	
Conductivity*	58700	1.00	uS/cm	ı	2112607	НМ	26-Nov-12	120,1	
Magnesium	267.	1.00	mg/L	l	2101718	HM	30-Nov-12	SM3500Mg- . E	
рН*	7.56	0.100	pH Units	1	2112607	HM	26-Nov-12	150,1	
Potassium	575	1.00	mg/L	ì	2101718	HM	30-Nov-12	HACH 8049	
Sadjum	9190	1.00	mg/L	t	2101718	HM	30-Nov-12	Calculation	
Sulfate*	261	10.0	mg/L	t	2112703	AP	27-Nov-12	375.4	
TD\$*	32300	5.00	mg/L	1	2112602	HM	21-Nov-12	1.001	
Alkalinity, Total*	412	4.00	mg/L	i	2110104	HM	26-Nov-12	1,018	

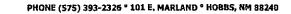
Cardinal Laboratories

*=Accredited Analyte

Celey D. Keena

Celey D. Keene, Lab Director/Quality Manager

Page 4 of 14





SUNDOWN ENERGY

Project, Ri

Project: REEVES QUEEN WATERFLOOD UN:

Reported: 19-Dec-12 15:56

P. O. BOX 277 WICKETT TX, 79788 Project Number: NOT GIVEN

Project Manager: KYLE PAXTON

Fax To: NOT GIVEN

COMP OF S VACUUM & LEA 403

H202825-03 (Water)

Ansiyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardina	il Laborat	ories					
Inorganic Compounds									
Alkalinity, Bicarbonate	317	5.00	mg/L	1	2110104	HM	13-Dec-12	310.1	
Alkalinity, Carbonate	ND	0.00	mg/L	ı	2110104	HM	13-Dec-12	310.1	
Chioride*	16700	4.00	mg/L	1	2121905	HM	19-Dec-12	4500-C1-B	
Conductlyity*	\$0900	1.00	uS/cm	1	2121806	AP	18-Dec-12	120.1	
pH*	7.57	0.100	pH Units	1	2121910	нм	11-Dec-12	\$50.1	
Resistivity	0.196		Ohms/m	1	2121908	HM	18-Dec-12	120.1	
Specific Gravity @ 60° F	1.016	0.000	[blank]	4	2121909	HM	19-Dec-12	SM 2710F	
Sulfate*	296	10.0	mg/L	l	2120501	AP	10-Dec-12	375.4	
TDS*	33300	5.00	mg/L	ı	2120605	ΑÞ	13-Dec-12	160.1	
Alkalinity, Total*	260	4.00	mg/L	1	2110104	НМ	13-Dec-12	310.1	
Dissolved Metals									
Barium	ND	1.00	mg/L	100	2121907	CK	13-Dec-12	200.7	GAL
Calcium	2200	100	mg/L	100	2121907	CK	13-Dec-12	200.7	GAL
Iron	ND	5.00	mg/L	100	2121907	CK	13-Dec-12	200.7	GAL
Magnesium	619	100	mg/L	100	2121907	.CK	13-Dec-12	200.7	GAL
Potassium	326	100	mg/L	100	2121907	CK	13-Dec-12	200.7	GAL
Sodium	7650	100	mg/L	100	2121907	CK	13-Dec-12	200.7	GAL

Cardinal Laboratories

*=Accredited Analyte

PLEASE (NOTE). Liability and Danages. Cardina's tability and deciri exclusive remedy for any dain anising, whether based in contract or bort, shall be finited to the account paid by client for analyzes. All claims, including those for nephysicons and any other skine whethereover shall be decired viewed viewed unless made in wicing and necewied by Cardinal water thinty (30) days after completion of the applicable service. In no ment shall Cardinal be lattle for incultant or consequential damages, including, without Bardaline, business interruptions, loss of use, or loss of profits incurred by client, it authoritative, stiffactive or successors arising out of or related to the performance of the convicta hereundar by Cardinal, regarding of which such claim is based parameter any of the shown stated resistors or determine, the the such cardinal above. This report that not be reproduced except in this with virtual approach of Cardinal Laboratories.

Celeg & Kenne

Celey D. Keene, Lab Director/Quality Manager

Page 5 of 14



SUNDOWN ENERGY

Project: REEVES QUEEN WATERFLOOD UN:

Reported:

P. O. BOX 277

Project Number: NOT GIVEN

19-Dec-12 15:56

WICKETT TX, 79788 Project Manager: KYLE PAXTON

Fax To: NOT GIVEN

Inorganic Compounds - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2101718 - *** DEFAULT PR	EP***									
Blank (2101718-BLK1)				Prepared: 1	7-Oct-12 A	nalyzed: 09	9-Nov-12			
Magnesium	ND	1.00	mg/L							
Potassium	ND	1,00	mg/L							
Calcium	ND	1.60	ուց/Լ							
LCS (2101718-BS1)				Prepared &	Analyzed:	17-Oct-12				
Potassium	3.00		mg/L	3.00		100	80-120			
Magnesium	54.4		mg∕L	50.0		109	80-120			
Calcium	20,8		mg/L	20.0		104	80-120			
Duplicate (2101718-DUP1)	Sourc	e: H202593-	01	Prepared: 1	7-Oct-12 A)-Nov-12				
Magnesium	1820	1.00	mg/L		1880			3.24	20	
Calcium	6710	1.60	mg/L		6410			4,57	20	
otassium	540	1.00	mg/L		540			0.00	20	
Batch 2110104 - General Prep - We	t Chem									
Blank (2110104-BLK1)				Prepared &	Analyzed:	31-Oct-12				
Ikalinity, Carbonate										
undimit, co comic	ND	0.00	mg/L							
Ukalinity, Bicarbonate	ND ND	0.00 5.00	mg/L mg/L							
•			_							
Ikalinity, Bicarbonate	· ND	5.00	mg/L	Prepared &	Analyzed:	31 - Oct-12				
Ukalinity, Bicarbonate Ukalinity, Total	· ND	5.00	mg/L	Prepared &	Analyzed:	31-Oct-12	80-120			
Ukalinity, Bicarbonate Ukalinity, Total .CS (2110104-BS1)	· ND	5,00 4.00	mg/L mg/L	Prepared &	Analyzed:	31-Oct-12	80-120 80-120			
Ukalinity, Bicarbonate Ukalinity, Total CS (2110104-BS1) Ukalinity, Carbonate	· ND ND ND	5.00 4.00	mg/L mg/L	Prepared &	Analyzed:	31-Oct-12				
Ukalinity, Bicarbonate Ukalinity, Total .CS (2110104-BS1) Ukalinity, Carbonate Ukalinity, Bicarbonate	· ND ND ND 137	5.00 4.00 0.00 5.00	mg/L mg/L mg/L mg/L	•		112	80-120			
Ukalinity, Bicarbonate Ukalinity, Total .CS (2110104-BS1) Ukalinity, Carbonate Ukalinity, Bicarbonate Ukalinity, Total	· ND ND ND 137	5.00 4.00 0.00 5.00	mg/L mg/L mg/L mg/L	100		112	80-120		20	Pin de sound Bird Bird William
ulkalinity, Bicarbonate ulkalinity, TotalCS (2110104-BS1) Ukalinity, Carbonate Ukalinity, Bicarbonate Ukalinity, TotalCS Dup (2110104-BSD1)	ND ND 137 112	5.00 4.00 0.00 5.00 4.00	mg/L mg/L mg/L mg/L	100		112	80-120 80-120	0.00	20 20	

Cardinal Laboratories

*=Accredited Analyte

PLEASE MOTE: LiabSty and Carmages. Cordinal's liabSty and client's exclusive entropy for any claim artury, whether based in contract or tont, shall be finited to the amount paid by client for incidental entropies. All claims, including those for neighborns and any other cause whether completed senters, the best determed whether unless mode in writing and received by Cardinal within story (30) days after completed in the proficulties senters, in no event shall Cardinal be labble for incidental or considerabile developes, without a installation, business interreptions, loca of use, or loca of profiles incurred by client, its subdicties, affiliates or unconsisted any only of the steril performance of the services hereunder by Cardinal, regardless of whether auch claims is taken upon my of this above stated regions or otherwise. Results related only the samples identified above. This report after the performance of cardinal suboreacries.

Celeg D. Kreene

Celey D. Keene, Lab Director/Quality Manager

Page 6 of 14



SUNDOWN ENERGY

Project: REEVES QUEEN WATERFLOOD UN:

Reported:

P. O. BOX 277 WICKETT TX, 79788 Project Number: NOT GIVEN
Project Manager: KYLE PAXTON

19-Dec-12 15:56

Fax To: NOT GIVEN

Inorganic Compounds - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2112104 - General Prep - Wet Chem									_	
Blank (2112104-BLK1)				Prepared &	Analyzed:	26-Nov-12	2			
Chloride	ND	4.00	mg/L			77	•			
LCS (2112104-BS1)				Prepared &	Analyzed:	26-Nov-12	<u> </u>			<u></u>
Chloride	104	4.00	mg/L	100		104	80-120			
LCS Dup (2112104-BSD1)				Prepared &	: Analyzed:	26-Nov-12	<u>:</u>			
Chloride	104	4,00	mg/L	100		104	80-120	0.00	20	
Batch 2112602 - Filtration				——————————————————————————————————————		_				
Blank (2112602-BLK1)				Prepared: 2	1-Nov-12 A	nalyzed: 2	9-Nov-12			
ros	ND	5.00	mg/L							
LCS (2112602-BS1)				Prepared: 2	1-Nov-12 A	nalyzed: 2	9-Nov-12			
TDS	239		mg/L	240		99.6	80-120			
Duplicate (2112692-DUP1)	Sou	rce: H202812	-03	Prepared: 2	1-Nov-12 A	nalyzed: 2	9-Nov-12			
rds	1560	5,00	mg/L		1660			6.21	20	
Batch 2112607 - General Prep - Wet Chem										
-CS (2112607-BS1)				Prepared &	Analyzed:	26-Nov-12	<u> </u>			
н	7.05		pH Units	7.00		101	90-110			
Conductivity	1410		uS/cm	1410		100	80-120			
Duplicate (2112607-DUP1)	Sou	rce: H202825	-01	Prepared &	Analyzed:	26-Nov-12				
Conductivity	40300	1.00	uS/cm		40300			0.00	20	
н	6.14	0.100	pH Units		6.11			0.490	20	

Cardinal Laboratories

*≈Accredited Analyte

PLEASE NOTE: Untility and Quantages. Cardinal's baptify and chanks extended extended for any claim prison, whether based in contract or tort, shall be limited to the amount paid by claim for zonlyses. All claims, including those for neglecture and individual prisons are completed in the application sometime of the application sometime. In no event shall contain be liable for incidental or consoperation demogration, business intermediate, or uncertainty of the applications, business intermediate, purposes intermediate, and the applications, purposes intermediate, and the applications of the applicati

Celes E Kune

Celey D. Keene, Lab Director/Quality Manager

Page 7 of 14



SUNDOWN ENERGY P. O. BOX 277 Project: REEVES QUEEN WATERFLOOD UN:

Reported: 19-Dec-12 15:56

WICKETT TX, 79788

Project Number: NOT GIVEN
Project Manager: KYLE PAXTON

Fax To: NOT GIVEN

Inorganic Compounds - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2112703 - General Prep - Wet Chem		- <u></u>								
Blank (2112703-BLK1)				Prepared &	: Analyzed:	27-Nov-12	!			
Suifate	ИD	10.0	mg/L							
LCS (2112703-BS1)				Prepared &	Analyzed:	27-Nov-12	<u> </u>			
Sulfate	16.9	10.0	mg/L	20.0		84,6	80-120		,	
LCS Dap (2112703-BSD1)				Prepared &	Analyzed:	27-Nov-12				
Sulfate	19.4	10.0	mg/L	20.0		97.2	80-120	13.8	20	
Batch 2120501 - General Prep - Wet Chem										·
Blank (2120501-BLK1)			•	Prepared &	Analyzed:	10-Dec-12				
Sulfate	ND	10.0	mg/L							
LCS (2120501-BS1)				Prepared &	Analyzed:	10-Dec-12				
Sulfate	16.7	10.0	mg/L	20.0		83.7	80-120			
LCS Dup (2120501-BSD1)				Prepared &	Analyzed:	10-Dec-12				
ulfate	18.1	10.0	mg/L	20.0		90,4	80-120	7.64	20	
Batch 2120605 - Filtration										
Blank (2120605-BLK1)				Prepared &	Analyzed:	06-Dec-12				
DS	ND	5.00	mg/L		•					
.CS (2120605-BS1)				Prepared &	Analyzed:	06-Dec-12				
DS	223		mg/L	240		92.9	80-120			

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Landing and Charages. Cardinal's EabEity and client's exclusive remarky for any claim prising, whether losced in contract or tork, shall be lented to the amount paid by client for anylysiss. All clients, and/eithing from the noglegorize and any solver cause whethoever shall be desired unless made in writing and received by Clientest waters they (30) days after completion of the applicable service. In no event shall Cardinal be failed for incidental or consequential dismages including, without lentacion, business interruption, less of us, or loss of profits incident by client, its conditional or successors aftering out of or related to the performance of the savices hereinder by Cardinal, regardless of whether and claim is based upon any of the above stated resistent or otherwise, Results related only to the samples identified above. This report thall not be reproduced except in full with vertical approval of Cardinal Laboratories.

Celeg D. Kuna

Celey D. Keene, Lab Director/Quality Manager

Page 8 of 14





SUNDOWN ENERGY

Project: REEVES QUEEN WATERFLOOD UN!

Reported:

P. O. BOX 277

Project Number: NOT GIVEN

19-Dec-12 15:56

WICKETT TX, 79788

Project Manager: KYLE PAXTON Fax To: NOT GIVEN

Inorganic Compounds - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2120605 - Filtration	•									
Duplicate (2120605-DUP1)	Sou	rce: H202905	-01	Prepared &	Analyzed:	06-Dec-12				
TOS	1200	5.00	mg/L		1140			5.13	50	
Batch 2121806 - General Prep - Wet Chem										
LCS (2121806-BS1)				Prepared &	: Analyzed:	18-Dec-12				
Conductivity	478		uS/cm	500		95,6	80-120			
Duplicate (2121806-DUPI)	Sour	rce: H203018	-01	Prepared &	Analyzed:	18-Dec-12		_		
Conductivity	1530	1.00	uS/cm		1530			0.00	20	
Batch 2121905 - General Prep - Wet Chem	<u> </u>							-		
Blank (2121905-BLK1)		•		Prepared &	Analyzed:	19-Dec-12				
Chloride	ИĎ	4.00	mg/L							
LCS (2121905-BS1)				Prepared &	Analyzed:	19-Dec-12				
Thloride	100	4.00	mg/L	100		100	80-120			_
.CS Dup (2121905-BSD1)				Prepared &	Analyzed:	19-Dec-12	•			
hloride	108	4.00	mg/L	100		108	80-120	7.69	20	
Batch 2121909 - General Prep - Wet Chem									<u></u>	
Duplicate (2121909-DUP1)	Sour	ce: H202825-	-03	Prepared &	Analyzed:	19-Dec-12		_		
pecific Gravity @ 60° F	1.014	0.000	[blank]		1,016			0.216	200	

Cardinal Laboratories

*=Accredited Analyte

PLEASE INCITE. Liability and Continges. Continue's basicity and clients exclusive research for any claim arising, whether bessel in context or text, stall be liabled to the brottom paid by client for athlysis. All claims, including those for negligance and any where cause withoutened shall be decimal variety unders affects for incidental and context, and the context of the special section. In so event shall Continue to the best consistent and context, and the context of the special section of the special retains of the special section of the special section of the special retains of the spe

Celey Ti Kuna

Celey D. Keene, Lab Director/Quality Manager

Page 9 of 14



PHONE (575) 393-2326 * 101 E. MARLAND * HOBBS, NM 88240

Analytical Results For:

SUNDOWN ENERGY P. O. BOX 277 Project: REEVES QUEEN WATERFLOOD UN:

Reported:

P. O. BOX 2// WICKETT TX, 79788 Project Number: NOT GIVEN
Project Manager: KYLE PAXTON

19-Dec-12 15:56

Fax To: NOT GIVEN

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2121910 - General Prep - Wet Chem										
LCS (2121910-BS1)				Prepared &	Analyzed:	11-Dec-12				
pH	7.00		pH Units	7.00		100	90-110			
Duplicate (2121910-DUP1)	Sou	rce: H202825	-03	Prepared &	Analyzed:	11-Dec-12				
pH	7.61	0.100	pH Units	-	7.57			0.527	20	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardrul's Exhibity and clern's exclusive remody for any drain arising, whether based in central or tord, that to liability to liability to be arrount paid by direct for analyses. All clerns, including those for neighbors and any other curse whetchever shall be decemed where anises made in writing and necessary by Cardrell within theiry (20) days after completion of the applicable service. In no event shall Cardrul be Bable for incidental or consequental damages, without the submitted because, but their submitted in the performance of the cardical harmonists of use, or loss of profile incurred by clerns, as substituting, affiliates or successions arising out of or relation to the performance of the cardical harmonists harmonists of the cardical harmonists.

Celey & Keine

Celey D. Keene, Lab Director/Quality Manager

Page 10 of 14



SUNDOWN ENERGY

Project: REEVES QUEEN WATERFLOOD UNI'

Reported:

P. O. BOX 277 WICKETT TX, 79788 Project Number: NOT GIVEN
Project Manager: KYLE PAXTON
Fax To: NOT GIVEN

19-Dec-12 15:56

Dissolved Metals - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2121907 - Dissolved/Potentia	lly Dissolved Metals									
Blank (2121907-BLK1)				Prepared: 1	2-Dec-12 A	nalyzed: 1	3-Dec-12			
Calcium	ND	1.00	mg/L							
Sodium	ND	1.00	mg/L							
Magnesium	ND	1.00	mg/L							
Potassium	ND	1.00	mg/L							
Iron	ND	0.050	m <i>g/</i> L							
Barium	ND	0.010	mg/L							
LCS (2121907-BS1)				Prepared: 1	2-Dec-12 A	nalyzed: 1	3-Dec-12			
Sodium	7.88		mg/L	01.8		97.3	85-115		<u>.</u>	
Magnesium	26.3		mg/L	25.0		105	85-115			
Calcium	4.68		mg/L	5.00		93.6	85-115			
Barium	2.36		mg/L	2.50		94.4	85-115			
Potassium	9.85		mg/L	10.0		98.5	85-115			
ron	4,87		mg/L	5.00		97.4	85-115			
LCS Dup (2121907-BSD1)				Prepared: 1	2-Dec-12 A	nalyzed: I	3-Dec-12			
Calcium	4.71		mg/L	5.00		94.2	85-115	0.639	20	
Magnesium	26,3		mg/L	25.0		105	85-115	0.00	20	
Sodium	7.87		mg/L	8.10		97.2	85-115	0.127	20	
Potassium	9.69		mg/L	10.0		96.9	85-115	1.64	20	
ron	4.91		mg/L	5.00		98.2	85-115	818.0	20	
Barium	2.36		mg/L	2,50		94.4	85-115	0.00	20	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Compages. Conduct's labelity and clients exclusive namedy for any claim arising, whether based in continue or tork, shall be entited to the amount pilid by client for analysis. All claims, including these for neighbors and any other conductive shall be exceeded without unless which is writing and neighbor within thanky (30) days after completion of the applicable stanks. In no every shall Conducted be labele for including including including which includes any other labeled in contractives and of profits accurated by client, its associations, and any other labeled in the performance of the services becaused by Conductive and any other labeled in the performance of the services becaused by Conductive and any other labeled in the performance of the services becaused by Conductive and the labeled in the performance of the services becaused by Conductive and the labeled in the performance of the services becaused by Conductive and the labeled in the performance of the services becaused by Conductive and the labeled in the labeled in

aleg There

Celey D. Keene, Lab Director/Quality Manager

Page 11 of 14



Notes and Definitions

GAL Analysis subcontracted to Green Analytical Laboratories, a subsidiary of Cardinal Laboratories.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

Insufficient time to reach temperature.

Chloride by SM4500CI-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Libbility and Changes. Cardinal's fability and clients exclusive remarky for any claim arising, whether based in context or text, shall be limbed to the amount paid by client for inniference and any other cause visitories of the applicable sentence. In one event shall be decread varied infects made in visiting and received by Clercial section thinty (30) chrys after complication of the applicable sentence. In one event shall Curdined be liable for incidence of the contest of the cont

Celeg & Keine

Celey D. Keene, Lab Director/Quality Manager

Page 12 of 14



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ANALYSIS REQUEST

101 East Mariand, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

Phone #: 214	-368 6100 Fax#: X	2/6	/S Ad	idross:	•		1	- 1			- (}
Project #;	Project Owner	:	Cir	ty:		13	1 1					
Project Name:	Water Sample	5	St	ato: Zip:	1							
Project Location	•		Ph	none #:		م ا	s	1		1 1		
Sampler Name:	Jason Able		Fa	ex#:	S	3	1			1 1	1	
Lab I.D. H202829	Sample I.D.	CONTANERS	WASTEWATER WASTEWATER SOIL SAUDGE SAUDGE SAUDGE	PRESERV SAMPLI	TIME	5 Sall Am						
Relinquished B	Date: Time: (Circle One)	210	Sample Condition Cool intact Test Pres	CHECKED BY:	Phone Result: REMARKS:	att: 🗇 Yes	<u> </u>	Add Phone add Fax 8:		y .c	om	

BILL TO

P.O. #: Company: Attn:

CARDINAL LABORATORIES SCALE INDEX WATER ANALYSIS REPORT

SUNDOWN ENERGY Company

Well Number :

Location **NOT GIVEN**

REEVES QUEEN WATERFLOOD UNIT COMPOSITE OF S VACUUM & LEA 403 Company Rep.: KYLE PAXTON Lease Name :

ANALYSIS

1. pH	7.57					
2. Specific Gravity @ 60/60 F.	1.0160					
3. CaCO3 Saturation Index @ 80 F.	+0.546	'Calcium Carbonate Scale Possible'				
@ 140 F.	+1.476	*	Calcium C	arb	onate Scale	e Possible'
Dissolved Gasses						
Hydrogen Sulfide	ND		PPM			
5. Carbon Dioxide	ND	F	PM			
6. Dissolved Oxygen	Not Determined					
Cations	mg/L	/	Eq. Wt.	=	MEQ/L	
7. Calcium (Ca++)	2,200.00	1	20.1	=	109.45	
8. Magnesium (Mg++)	619.00	1	12.2	=	50.74	
9. Sodium (Na+)	7,650	1	23.0	=	321.49	
10. Barium (Ba++)	0.000	/	68.7	=	0.00	
Anions						-
11. Hydroxyl (OH-)	0	1	17.0	=	0.00	
12. Carbonate (CO3=)	0	1	30.0	=	0.00	
13. Bicarbonate (HCO3-)	317	I	61.1	=	5.19	
14. Sulfate (SO4=)	296	1	48.8	=	6.07	
15. Chloride (Cl-)	16,700	1	35.5	=	470.42	
Other						•
16. Soluble Iron (Fe)	0.000	1	18.2	=	0.00	
17. Total Dissolved Solids	33,300					
18. Total Hardness As CaCO3	8,042.0					
19. Calcium Sulfate Solubility @ 90 F.	2,270					•
20. Resistivity (Measured)	0.196	Ohm/Meters			@ 77	Degrees (F)

Logarithmic Water Pattern

10,000 1,000 too 10 10 100 1,000 10,000 Ş

Date Sampled: 11/20/12

mg/L
420
413
5,450
0
0
2,416
0
0
18,794

Page 14 of 14

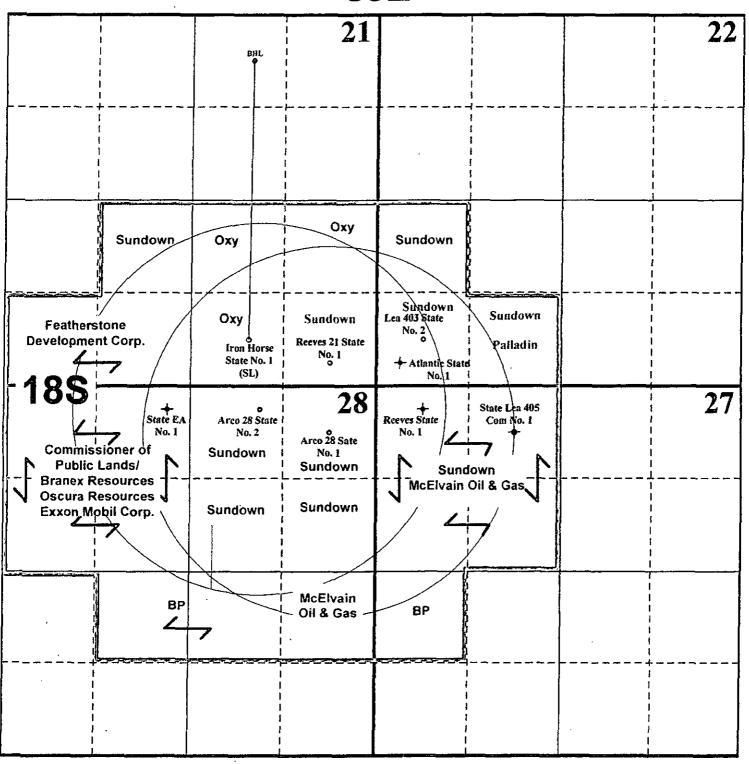
Form C-108 Affirmative Statement Sundown Energy, LP Arco 28 State Wells No. 1 & 2 Section 28, T-18 South, R-35 East, NMPM, Lea County, New Mexico

Available geologic and engineering data has been examined and no evidence of open faults or hydrological connection between the injection zone and any underground sources of drinking water has been found.

Ross Pearson

Area Production Manager Sundown Energy, LP

35E



- O Proposed Injection Well
- O Producing Well
- PA'd Well

C-108 Notice Area

Text Leasehold or Mineral Interest Owner
Operator

Sundown Energy, LP
Reeves Queen Unit Waterflood
Offset Operator/Leashold Owner
Identification

Sundown Energy, LP Form C-108: Arco 28 State Wells No. 1 & 2 Section 28, T-18 South, R-35 East, NMPM Lea County, New Mexico

Offset Operator/Leasehold Owner Notification List (See Attached Map)

Oxy USA, Inc. P.O. Box 4294 Houston, Texas 77210

Featherstone Development Corp.
P.O. Box 429
Roswell, New Mexico 88202

Paladin Energy Corporation 10290 Monroe Drive, Suite 301 Dallas, Texas 75229

Commissioner of Public Lands P.O. Box 1148 Santa Fe, New Mexico 87504

T.H. McElvain Oil & Gas LLP 1050 17th Street, Suite 2500 Denver, Colorado 80265

Branex Resources/Oscura Resources 629 Sudderth Drive, Ruidoso, New Mexico 88345

BP

740 Rosebud Rd. Nara Vista, New Mexico 88430

Exxon Mobil Corporation P.O. Box 4358 Houston, Texas 77210-4358

Surface Owner (Arco 28 State Wells No. 1 & 2)

Commissioner of Public Lands P.O. Box 1148 Santa Fe, New Mexico 87504

Additional Notice

Oil Conservation Division 1625 N. French Drive Hobbs, New Mexico 88240