

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTDEC 17 2007
OCD-ARTESIA

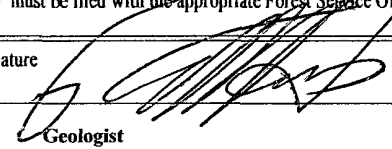
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input type="checkbox"/> DRILL <input checked="" type="checkbox"/> REENTER		7 If Unit or CA Agreement, Name and No
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		8 Lease Name and Well No. 36939 Loco Hills Water Disposal #1
2 Name of Operator Ray Westall 18862		9 API Well No. 30-015-03979
3a. Address P.O. Box 4, Loco Hills, NM. 88255	3b. Phone No. (include area code) 505.677.2370	10. Field and Pool, or Exploratory 96101
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 1080' FSL & 1830' FEL At proposed prod. zone Same Roswell Controlled Water Basin		11. Sec., T. R. M. or Blk. and Survey or Area Sec. 33, T16S-R30E
14 Distance in miles and direction from nearest town or post office* 4.5 miles north of Loco Hills, NM		12 County or Parish Eddy
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig unit line, if any) 990'		13. State NM
16. No. of acres in lease 160		17 Spacing Unit dedicated to this well 240
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.		20. BLM/BIA Bond No. on file NM0322
19 Proposed Depth 12,420'		21. Estimated duration 5 days
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3724.6 GL		22 Approximate date work will start* 09/01/2007

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, must be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest-System Lands, the SUPO must be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the BLM.

25. Signature 	Name (Printed/Typed) Randall Harris	Date 08/06/2007
Title Geologist		
Approved by (Signature) /s/ Don Peterson	Name (Printed/Typed) /s/ Don Peterson	Date DEC 12 2007
Title FIELD MANAGER		
Office CARLSBAD FIELD OFFICE		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

*(Instructions on page 2)

SEE ATTACHED FOR
CONDITIONS OF APPROVALAPPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

FORM C-128
 Revised 5/1/57

SEE INSTRUCTIONS FOR COMPLETING THIS FORM ON THE REVERSE SIDE

SECTION A

Operator RAY WESTALL		Lease LOS HILLES WATER DISPOSAL		Well No. 1
Tennessee Gas Transmission Co.		Square Lake Deep Unit		
Unit Letter J	Section 34	Township 10 North	Range 30 East	County Eddy
Actual Footage Location of Well: 1050 feet from the South line and 1830 feet from the East line				
Ground Level Elev. 3724.6	Producing Formation	Pool Wildcat	Dedicated Acreage: 40 Acres	

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES X NO ____ ("Owner" means the person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or for himself and others. (65-4-29 (a) NMSA 1955 Comp.)
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES ____ NO ____ If answer is "yes," Type of Consolidation ____
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner	Land Description

SECTION B

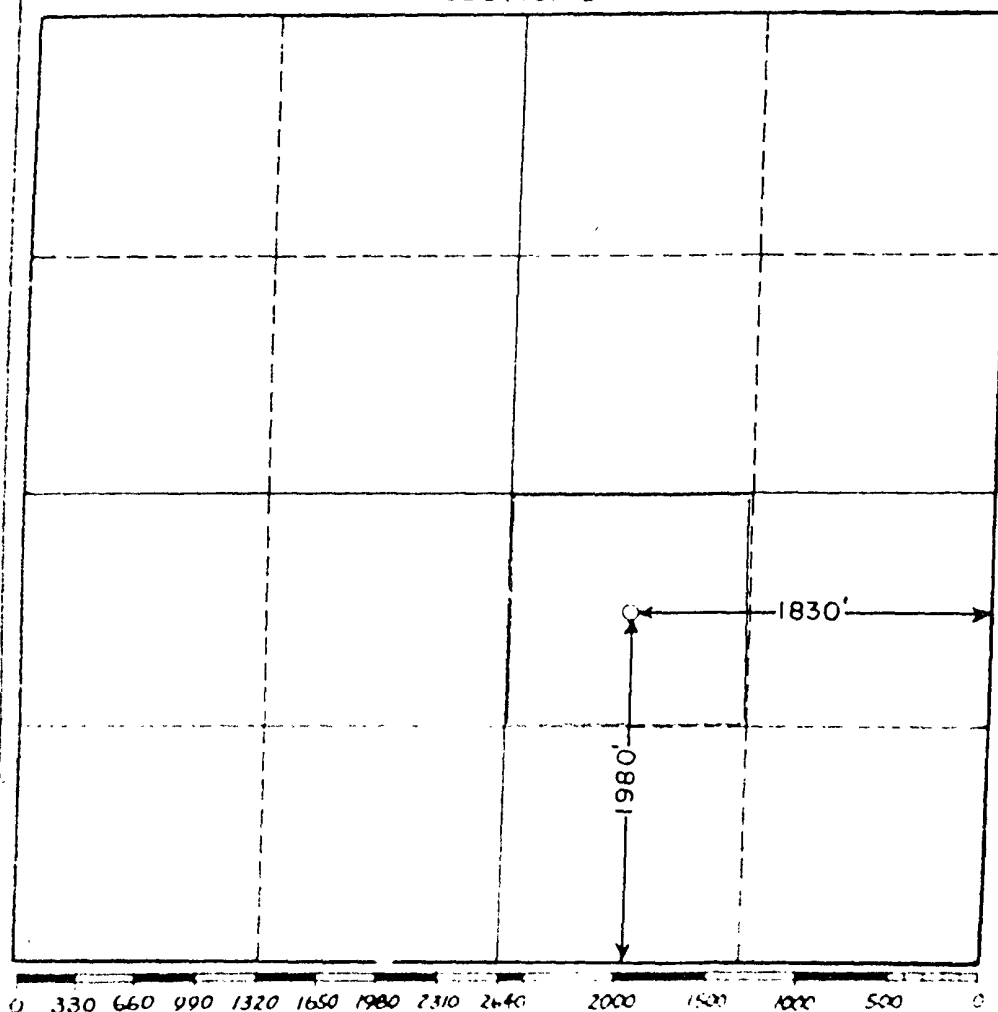
CERTIFICATION

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

Name D. W. Coffey
Position District Production Supt.
Company Tennessee Gas Transmission Co.
Date April 9, 1959

I hereby certify that the well location shown on the plat in SECTION B was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed 4-9-59
Registered Professional Engineer and/or Land Surveyor, JOHN W. WEST
Certificate No. NEW 515 W. 573



STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Date: August 7, 2007

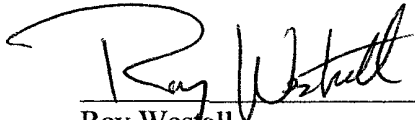
Lease # LC/60325
Loco Hills Water Disposal #1

Legal Description: NWSE Sec 33, T16S-R30E
EDDY County, New Mexico

Formations(s): Devonian

Bond Coverage: Statewide

BLM Bond File #: NM0322



Ray Westall
Owner

DRILLING PROGRAM

Attached to Form 3160-3

Ray Westall

LOCO HILLS WATER DISPOSAL #1

1980' FSL & 1830' FEL

Section 33-16S-30E

Eddy County, New Mexico

This well is a re-entry of: Tennessee Gas Transmission Company
Square Lake Deep Unit #1

mexico
The New Oil Conservation Division has approved of this well for a disposal.

1. Geologic Name of Surface Formation:

Quaternary

2. The geological markers have previously been filed.

3. Estimated Depth of Anticipated Fresh Water, Oil or Gas:

None

4. Casing Program:

EXISTING

Hole Size	Interval	OD Casing	Wt.	Grade Type
17 1/2"	0-338'	13 3/8"	54.5#	J-55 STC
12 1/4"	2116-3138	9 5/8"	36#	J-55 H-40 STC

PLANNED

Tie back-in the 9 5/8" at 2116'	9 5/8"	1720	36#	H-40 STC
		CLPS 2020#	Burst 3950#	3520
8 3/4"	3138'-12,400'	5 1/2"	17#	N-80 STC
			CLPS 6280#	Burst 7740#

Per operator 5 1/2"
9-14-07

1500'	P-110	17#	LTC
8500'	N-80	17#	LTC
2400'	P-110	17#	LTC

Cement Program:

13 3/8 Surface Casing: All ready cemented

9 5/8 Intermediate Casing: Cement to surface with 480 sx of Class C w/2% cc.
480 sxs x 1.18 ft³/sk = 566.40 ft³

5 1/2 Production Casing: 375 sxs Class H 11,500-12,400'
DV Tool set at 11,500 cement to surface Class C 2500 sxs
2500 sxs x 1.32 ft³/sk = 3300 ft³

5. Minimum Specifications for Pressure Control:

see
COA

The blowout preventer equipment (BOP) will consist of a single ram-type preventer. The unit will be manually operated and will be equipped with blind rams. This BOP will be nipped up on the 13 3/8" surface casing and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 2000 psi before drilling out of surface casing.

6. Types and Characteristics of the Proposed Mud System:

Depth	Type	Weight	Viscosity	Waterloss
0-12,400	Brine	9.8-10.2	28-36	N.C.

7. Auxiliary Equipment: None

8. Logging, Testing, and Coring Program:

A. Cement Bond Log

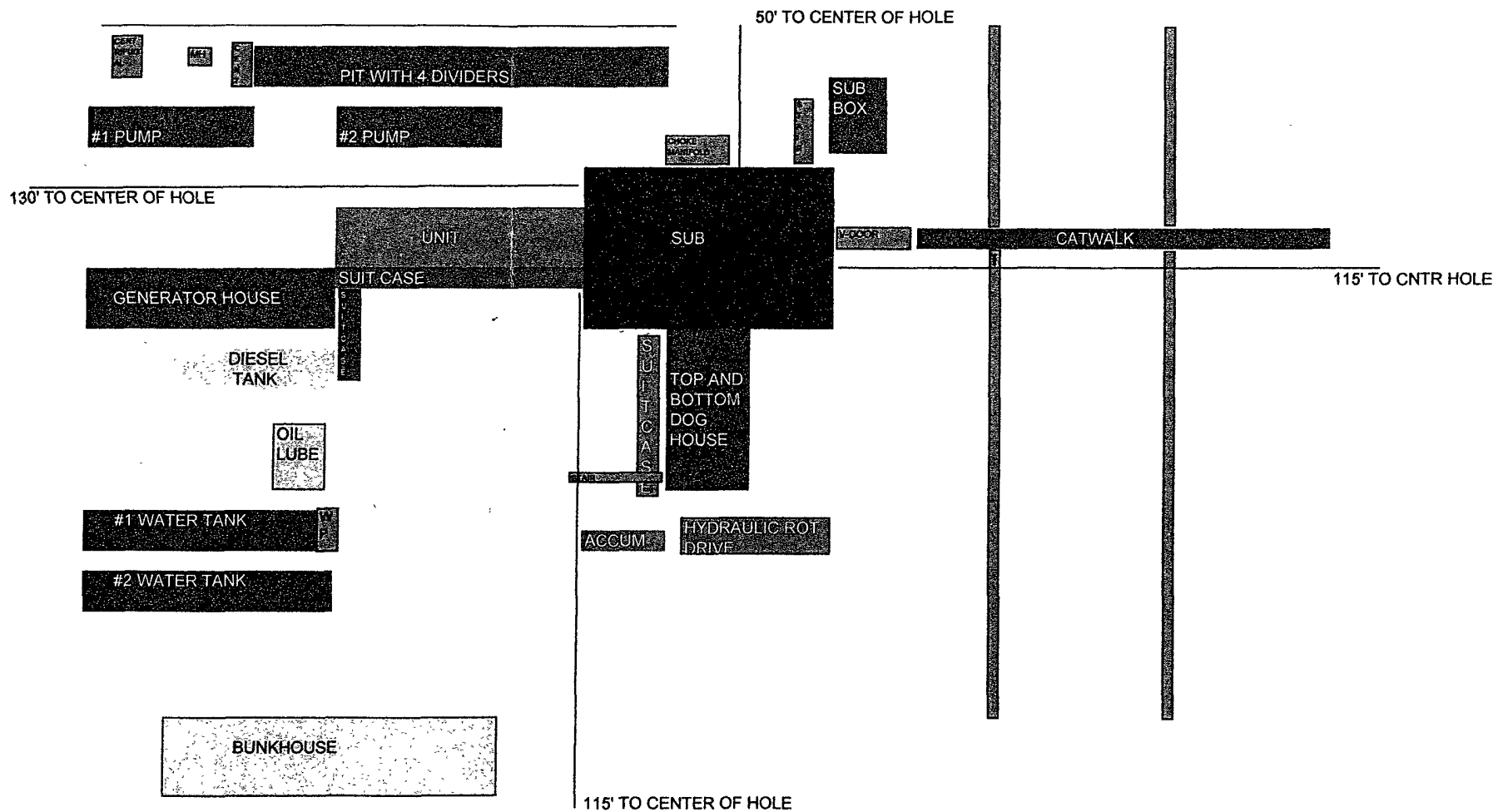
9. Abnormal Conditions, Pressures, Temperatures, and Potential Hazards:

No abnormal pressures or temperatures are anticipated. The bottom hole temperature (BHT) at TD is 150 and estimated bottom hole pressure (BHP) is 8700 psig.

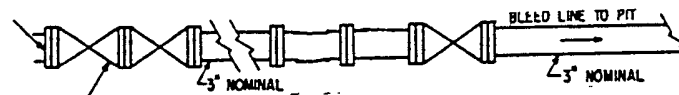
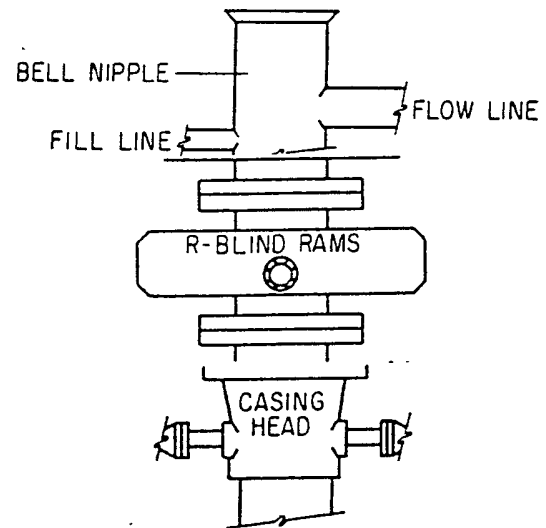
10. Anticipated Starting Date and Duration of Operations:

Location and road work will begin until approval has been received from the BLM. Once commenced, the drilling operation should be finished in approximately 5 days.

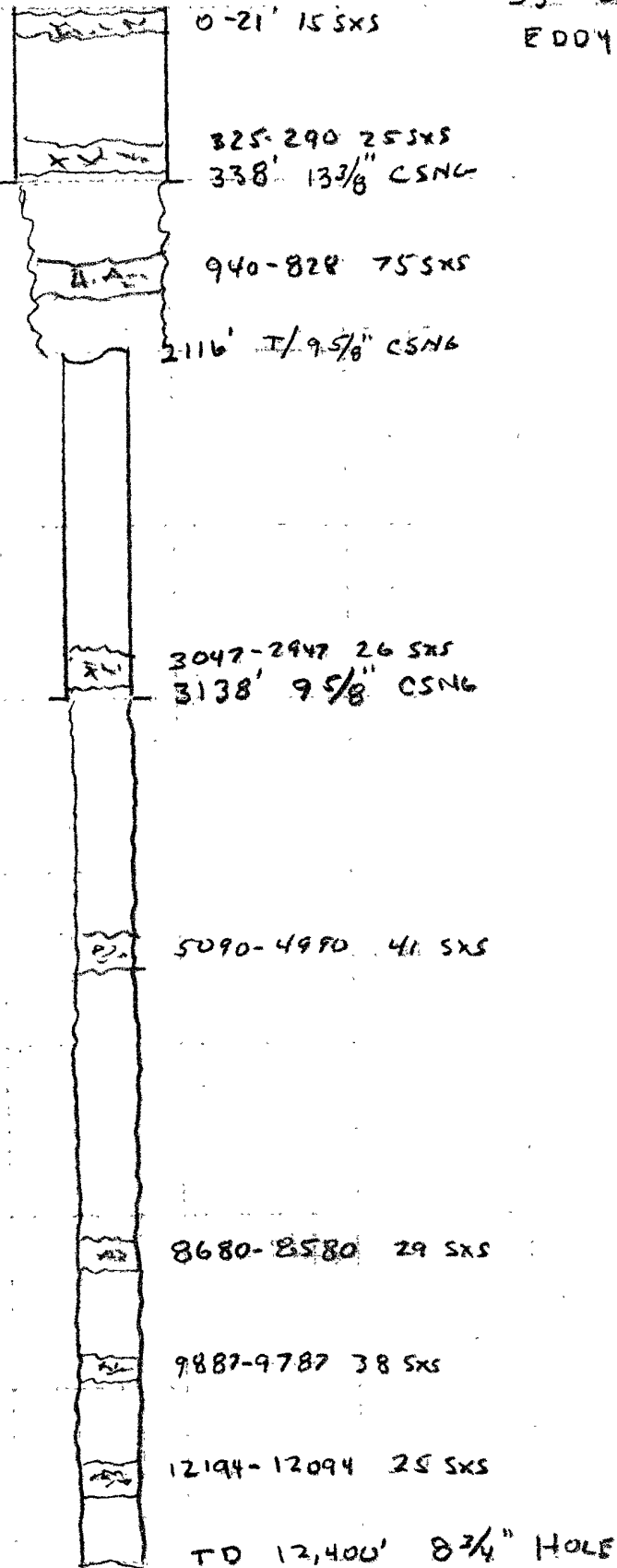
RAY WESTALL
LOLO HILLS WATER DISPOSAL #1
30-015-03979
SEC 33 T16S-R30E
See COA's



2M



RAY WESTALL
LOCO HILLS WATER DISPOSAL #1
33-165-30E
EDDY CO NEW MEXICO



SURFACE USE AND OPERATING PLAN

Attached to form 3160-3
Ray Westall
Loco Hills Disposal Well #1

1. Existing Roads:

- A. All roads to the location are shown in Exhibit #2. The existing roads are illustrated in read and are adequate for travel during drilling and production operations. Upgrading of the road prior to re-entry will be done where necessary as determined during the onsite inspection.
- B. Directions to location: From Loco Hills proceed north on 217 for 3.8 miles turn east onto Mallett road, 0.6 miles, north on oil service road for 0.7 miles.
- C. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as log as any operations continue on this lease.

2. Proposed Access Road: None

3. Location of Existing and/or Purposed Facilities:

- A. Ray Westall will construct facilities on well pad if well is capable of disposal.
- B. If the well is productive, power will be obtained from Central Valley Electric will apply for RWO for their power lines.

4. Location and Type of Water Supply:

The well will be drilled with a combination brine and fresh water mud system as outlined in the drilling program. The water will be obtained from commercial water stations in the area and hauled to location by transport truck over the existing and proposed access roads. .

5. Source of Construction Materials:

All caliche required for construction of the drill pad and the upgrade of the access road will be obtained from a BLM approved caliche pit and or recovered from old well pads.

6. Methods of Handling Water Disposal:

- A. Drilling fluids will be contained in a steel reverse unit pit.

- B. Garbage and trash produced during drilling or completion operations will be hauled off. All waste material will be contained to prevent scattering by the wind. All water and fluids will be Loco Hills Water Disposal facility. No toxic waste or hazardous chemicals will be produced by this operation.
- C. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days. No adverse materials will be left on location.

7. Ancillary Facilities: None required

8. Plans for Restoration of the Surface:

- A. Upon finishing drilling and or completion operations, all equipment and other material not needed for operations will be removed.
- B. All trash, garbage, and pit lining will be hauled away in order to leave the location in an aesthetically pleasing condition.

9. Surface Ownership:

The wellsite and lease is located on Federal Surface.

- A. The area around the well site is grassland and the top soil is sandy. The vegetation is native scrub grasses with oakbursh, sagebrush, yucca, and prickly pear.
- B. There is no permanent or live water in the immediate area.

10. Lessee's and Operator's Representative:

The Ray Westall representative responsible for assuring compliance with the surface use plan is as follows:

Ray Westall
P.O. Box 4
Loco Hills, New Mexico 88255
Phone: 505.677.2370 (office)
505.885.3674 (home)

Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Ray Westall and its contractors and subcontractors in conformity with this plan and the provision of 18 U.S.C. 1001 for the filing of a false statement.

Date: 8/6/07

Signed: _____


Randall L. Harris



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

ADMINISTRATIVE ORDER SWD-1089

APPLICATION OF RAY WESTALL FOR PRODUCED WATER DISPOSAL, EDDY COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), RAY WESTALL (OGRID 18862) made application to the New Mexico Oil Conservation Division for permission to utilize for produced water disposal its Loco Hills Water Disposal Well No. 1 (API No. 30-015-03979) located 1980 feet from the South line and 1830 feet from the East line of Section 33, Township 16 South, Range 30 East, NMPM, Eddy County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations;
- (2) Satisfactory information has been provided that all offset operators and surface owners have been duly notified;
- (3) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met; and
- (4) No objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED THAT:

The applicant is hereby authorized to re-enter and utilize for produced water disposal its Loco Hills Water Disposal Well No. 1 (API No. 30-015-03979) located 1980 feet from the South line and 1830 feet from the East line of Section 33, Township 16 South, Range 30 East, NMPM, Eddy County, New Mexico, in such manner as to permit the injection of produced water for disposal purposes into the Devonian formation through perforations from 12250 feet to 12360

feet and through plastic-lined tubing set with a packer located within 100 feet of the top of the injection perforations.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

After re-entering this well, installing injection casing, and cementing the injection casing, a Cement Bond Log shall be run and supplied to the Division if cement did not circulate on either stage of the cementing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer.

After installing injection tubing, the casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The wellhead injection pressure on the well shall be limited to **no more than 2450 psi**. In addition, the injection well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface injection pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the injection formation. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Artesia district office of the Division of the date and time of the installation of disposal equipment and of any mechanical integrity test so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Artesia district office of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

PROVIDED FURTHER THAT, jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

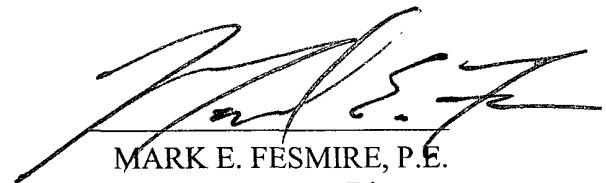
The operator shall provide written notice of the date of commencement of injection to the

Artesia district office of the Division.

The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator received by the Division prior to the termination date, may grant an extension thereof for good cause shown.

Approved at Santa Fe, New Mexico, on August 1, 2007.



MARK E. FESMIRE, P.E.
Director

MEF/wvjj

cc: Oil Conservation Division – Artesia
Bureau of Land Management – Carlsbad

VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 2 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(505) 361-2822

1. A Hydrogen Sulfide (H₂S) Drilling Plan should be activated 500 feet prior to drilling out of the 9-5/8" casing shoe. **H₂S has been measured in Section 34 measuring 150 ppm in gas streams and 150 ppm in STVs. It has also been reported in numerous other sections in this township measuring 1600-10000 ppm in gas streams and 20-4000 ppm in STVs.**
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
3. When floor controls are required, (3M or Greater) controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

B. CASING

1. The 13-3/8 inch surface casing **is already existing, set at 338' and cemented to surface.**

Possible lost circulation in the Grayburg formation.

Possible water flows in the Salado and Artesia Groups.

2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing and cemented to the surface. **The segment from 2116-3138' is existing and cemented with 400 sacks. Tie back will be cemented to surface. Additional cement may be required.**
CIT required on casing prior to drilling out of 9-5/8" casing.

- a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial action will be done prior to drilling out that string.
3. The minimum required fill of cement behind the **5-1/2** inch production casing is:
- ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office.
4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.
3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8"** intermediate casing shoe shall be **5000 (5M)** psi.
4. The appropriate BLM office shall be notified a minimum of 2 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company.

- b. The results of the test shall be reported to the appropriate BLM office.
- c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
- e. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** if the time between drilling out the cement at the intermediate casing shoe and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

D. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented.

Engineer on call phone (after hours): Carlsbad: (505) 706-2779

WWI 091007