ATS-08-144

Form 3160-3 (August 2007)	المناسلة المناسلة المناسلة			APPROVED o 1004-0137	
	./	Expires .	July 31, 2010		
UNITE	5 Lease Serial No.				
DEPARTMENT (NM				
DEC 17 2007 BUREAU OF LAR	6 If Indian, Allottee or	6 If Indian, Allottee or Tribe Name			
APPLICATION FOR PERM	IIT TO DRILL OR REENTER				
la. Type of Work DRILL	REENTER		7. If Unit or CA Agreem	ent, Name and No	
		3	8 Lease Name and Well	No.	
1b. Type of Well. Oil Well Gas Well O	her Single Zone Mul	tiple Zone	GISS	LER #2	
2 Name of Operator			9. API Well No.		
BURNETT OIL CO., INC.	•		30	-015- 36603 ploratory G (c 1) + T 4	
3a Address	3b. Phone No. (include area code)		10. Field and Pool, or Ex	ploratory Gleriera	· 4050
801 Cherry ST. Unit #9 Fort Worth, Tx	(817) 332-5108		LOCO HIL	LS,1	P
4. Location of Well (Report location clearly and in accordance	1		11 Sec , T , R., M., or B		
At surface Unit O, 330' FSL, 180			SEC 11, T17S, R	•	
_ At proposed prod zone SAME AS ABOVE	Roswell Controlled Water	Basin			
14. Distance in miles and direction from nearest town or post off	ice*		12 County or Parish	13. State	
Approx 6 miles East & North of Loco Hills 15. Distance from proposed*	16. No. of Acres in lease	17 Spacia	ng Unit dedicated to this well	NEW MEXICO	
location to nearest 330'	40 ACRES	ACRE	_	"L	
property or lease line, ft (Also to nearest drig. unit line, if any)			40		
18. Distance from proposed location*	19. Proposed Depth	20. BLM/	BIA Bond No. on file		
to nearest well, drilling, completed, applied for, on this lease, ft.	6000'	NMB#	ŧ 000197		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*		23 Estimated duration		
3731' GL	December 1, 2007		25 Days to Drill		*
	24. Attachments				
The following, completed in accordance with the requirements of	Onshore Oil and Gas Order No 1, shall be attach	ed to this form.			
Well plat certified by a registered surveyor.	4. Bond to c	over the operat	tions unless covered by an	existing bond on file (see	
A Drilling Plan. A Surface Use Plan (if the location is on National)	Item 20 ab		•		
SUPO shall be filed with the appropriate Forest Service Offi			information and/or plans a	as may be required by the	
	BLM.				
25. Signature	Name (Printed/Typed)		Date	1 / 1 / 5	~
Marka. Caroly	MARK JACOBY		//	0/3//2007	/
Title (1)					
ENGINEERING MANAGER					
Approved by (Signafure) Don Peterson	Name (Printed/Typed) /S/ Don	Peterso	Date	DEC 1 2 2007	
Title	Office CADIO	ים אם ב	ורוף טבביס	r	
- FIELD MANNACED	UARL		IELD OFFIC		
Application applova the strot Warfah of certify that the approperations thereon	licant holds legal or equitable title to those rig	-			
Conditions of approval, if any, are attached.		APPRO	OVAL FOR TWO	YEARS	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, n		fully to make to	any department or agency o	f the United	
States any false, fictitious or fraudulent statements or representat	ions as to any matter within its jurisdiction				

SEE ATTACHED FOR CONDITIONS OF APPROVAL

(Continued on page 2)

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

*(Instructions on page 2)

DISTRICT I 1625 N. PRENCH DR., HORRS, NW 88240

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102

Revised October 12, 2005 Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT II 1301 W. GRAND AVENUR, ARTESIA, NM 88210

OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR.

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 Santa Fe, New Mexico 87505

Gleriera- yeso

DISTRICT IV WELL LOCATION AND ACREAGE DEDICATION PLAT □ AMENDED REPORT 1220 S. ST. FRANCIS DR., SANTA FE, NM 87505 API Number Q-015-Property Name Well Number **GISSLER** 2 Operator Name Elevation BURNETT OIL COMPANY 3731

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	11	17-S	30-E		330	SOUTH	1800	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint o	or Infill Co	nsolidation (Code Ore	der No.		1		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered
	by the division. Mand Jacoby 10/31/200 Signature Mark A. Sacoby Printed Name
GEODETIC COORDINATES NAD 27 NME Y=670451.6 N X=621008.1 E	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat 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 belief.
LAT.=32.842537' N LONG.=103.939334' W 3723.6' 3730.7'	Date Surveyed DSS Signature & Seal 96 Professional Surveyor Professional Surveyor Signature & Seal 96 Pro
3717,8' 3721.6'	Certificate No. GARY EIDSON 12641 RONALD RIDSON 3239



MASTER DRILLING PLAN BURNETT OIL CO., INC.

ALL VERTICAL CEDAR LAKE / LOCO HILLS PADDOCK WELLS

FEDERAL LEASE # LC029338A, LC029339A, LC030570A, LC055264, LC055958, NM2746, NM2747 FEDERAL LEASE # NM2748 & NM074939

Section 11, 12, 13, 14, 23, 24 & 25, Township 17 South, Range 30 East, Eddy County, N.M.

ACTUAL WELL LOCATION WILL BE ON THE SUBMITTED 3160-3 AND SURFACE USE PLAN

1. Geological Name of Surface Formation

a. Alluvium.....Surface

2. Estimated tops of Geologic Markers & Depths of Anticipated Fresh Water, Oil or Gas:

a.	Seven Rivers	1604'	Oil
b.	Queen	2222'	Oil
C.	Grayburg	2670'	Oil
d.	San Andres	2985'	Oil
e.	Glorieta	4460'	Oil
f.	Total Depth	6000'	

No other formations are expected to yield oil, gas or fresh water in measurable volumes. We will set 10-3/4" casing @ approx. +/- 400' in the Anhydrite, above the Salt and circulate cement to surface. We will isolate the oil zones by running 7" casing to total depth and circulating cement to the surface.

.3. Casing Program: (ALL CASING WILL BE NEW API APPROVED MATERIAL.)

<u>Hole</u> Size	Interval	OD Csg	Weight	Collar	<u>Grade</u>	Collapse Design Factor		Tension Design Factor
14-3/4"	0'-380'	10-3/4"	32.75#	ST&C		1.125	1.00	1.80
8-3/4"	0'-6000'	7"	23.00#	LT&C		1.125	1.00	1.80

4. Cementing Program (Note Yields and DV Tool Depth if Multiple Stage.)

a. 10-3/4"	Surface	Cement to surface Lead with 180 sks Class H cement +10% A-10, + 10#/sk
		LCM-1, 1% CaCl, 0.01 gps FP-6L. 14.6 ppg. Tail with 650 sks Class C
		cement + 2% CaCl + 0.01 gps FP-6L.14.8 ppg, 874 CF yield. TOC Surface.

b. 7" Production Stage 1 Cement: 550 sks (50:50) Poz (Fly Ash):Class C cement + 2% Bentonite + 0.01 gps FP-6L + 0.3% FL-52A + 1.2% CD-32 + 5% Sodium Chloride. DV @ approx. 2600'

Stage 2 Cement: Lead with 1800 sks (35:65) Poz (Fly Ash): Class C cement + 6% Bentonite + 5 lbs/sk LCM-1 + 0.125 lbs/sk Ceilo Flake + .01 gps FP-6L + 5% Sodium Chloride. Tail with 100 sks Class C cement + 1% CaCl + 0.01 gps FP-6L.14.8 ppg 3816 CF Yield, TOC SURFACE.

The above cement volumes may be revised pending the caliper measurement from the open hole logs. Casing design is to bring all cement to the surface.

5. Pressure Control Equipment:

The blowout prevention equipment (BOPE) shown in Drilling Exhibit E will consist of a 2000 PSI Hydril Unit with hydraulic closing equipment. The equipment will comply with Onshore Order #2 and will be tested as described in this order. The 10-3/4" drilling head will be installed on the surface casing and in use continuously until total depth is reached. An independent testing company (Mann Welding) will be used for the testing. All BOPE and associated equipment will be tested to 2000 PSI with the rig pump prior to drilling out the 10-3/4" casing shoe. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the BOP. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having 2000 PSI WP rating.

6. Proposed Mud Circulation System

Depth	Mud Wt	<u>Visc</u>	Fluid Loss	Type System
0'-380'	8.6-9.5			Fresh Water
381'-6000'	10.0 max			Brine Water

The necessary mud products for weight addition and fluid loss control will be on location at all times.

7. Auxiliary Well Control and Monitoring Equipment:

- a. A Kelly cock will be in the drill string at all times.
- b. A full opening drill pipe stabbing valve with the appropriate connections on the rig floor at all times.
- c. Hydrogen Sulfide detection equipment will be in operation after drilling out 10-3/4" casing shoe until 7" casing is cemented. The breathing equipment will be on location from drilling out the 10-3'4" casing shoe until total depth is reached.

8. Logging, Coring and Testing program:

- a. Any drill stem tests will be based on geological sample shows.
- b. The open hole electrical logging program will be:
 - 1.) Total Depth to 1000': Dual Laterolog-Micro Laterolog wit SP and GR. Compensated Neutron-Z Density log with Gamma Ray and Caliper.
 - 2.) Total Depth to Surface: Compensated Neutron with Gamma Ray.
 - 3.) No coring program is planned.
 - 4.) Additional testing will be done subsequent to setting the 7" production casing. The specific Intervals will be based on log evaluation, geological sample shows and drill stem tests.

9. Potential Hazards:

No abnormal pressures or temperatures are expected. There is known H2S in this area. The operator will comply with the provisions of Onshore Oil and Gas Order #6. No lost circulation is expected to occur. All personnel will be familiar with the safe operation of the equipment being used to drill this well. The maximum anticipated bottom hole pressure is 1000#. The maximum anticipated bottom hole temperature is 92°F.

10. Anticipated Starting Date and Duration of Operation

Road and location construction will begin after BLM has approved the APD and has approved the start of the location work. The anticipated spud date will be as soon as the location building work has been completed and the drilling rig is available to move to the location. Move in and drilling is expected to take approx 25 days. If production casing is run, an additional 60 days would be required to complete the well and install the necessary surface equipment (pumping unit, electricity, flowline and storage facility) to place the well on production.

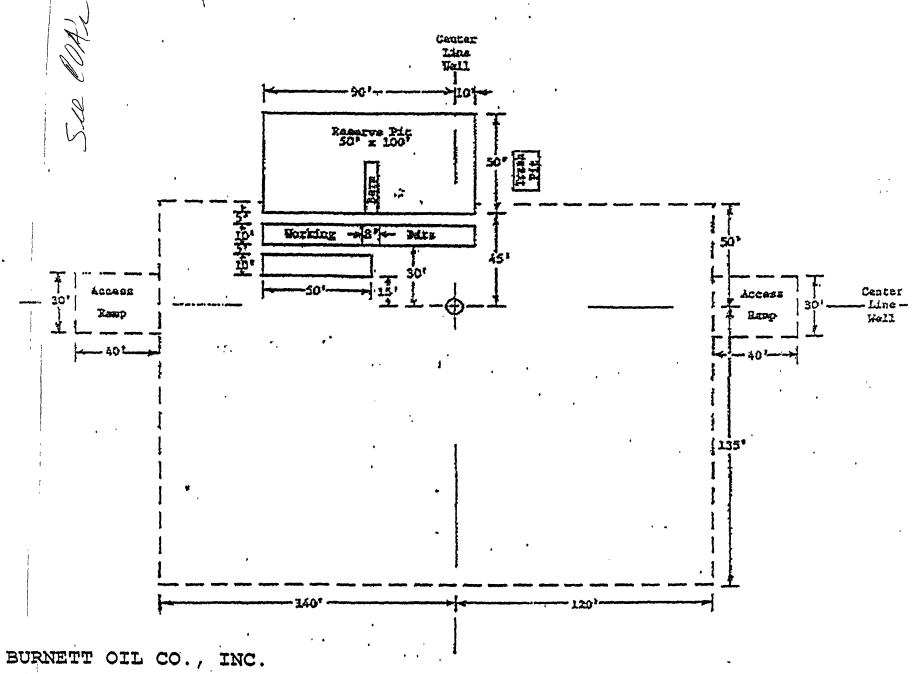
11. Operator's representative on the site:

Burnett Oil Co., Inc. field representative responsible for compliance with the approved drilling and operations plan is

> Mr. Belton Mathews, District Supt. P.O. Box 188 Loco Hills, New Mexico 88255 Office phone: 505-677-2313

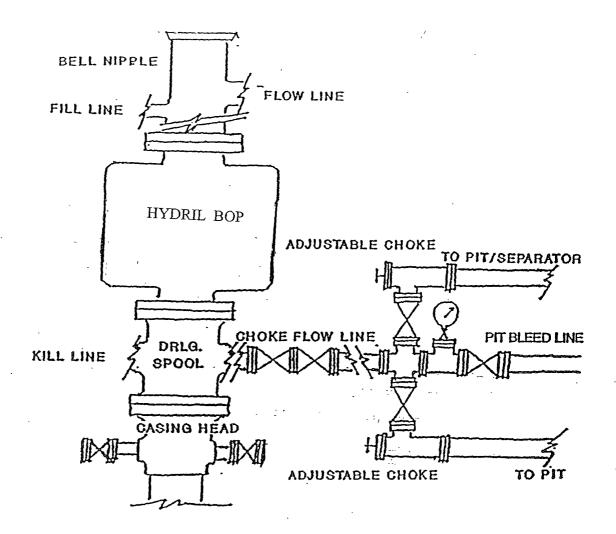
Home phone: 505-746-8647 Cellular phone: 505-703-9601

Engineering Manager



PROPOSED DRILL SITE LAYOUT

GISSLER #2 SURFACE EXHIBIT D



BURNETT OIL CO., INC.

BLOWOUT PREVENTER & CHOKE MANIFOLD DIAGRAM 2000 PSI WORKING PRESSURE SERIES 600 FLANGES 6666

SURFACE USE PLAN OF OPERATIONS

BURNETT OIL CO., INC.
Gissler Well No. 2, Lease No. NM2746
Surface Location Unit O, 330' FSL, 1800' FEL
Section 11, Township 17 South, Range 30 East, Eddy County, N. M.

1. EXISTING ROADS:

- a. The well site and elevation plat for the proposed well are reflected on the well site layout; Form C-102. This well was staked by John West Surveying Company.
- b. All roads into the location are shown on the Vicinity Map (Exhibit A.)
- c. Directions to the location: from the intersection of US Hwy #82 and County Road (CR) #220 go North on CR #220 approx 2.5 miles, turn left, go west approx 0.7 mile, turn left and go approx 0.1 mile, follow road bend to the left and go approx.0.6 mile to this location.

2. New or Reconstructed Access Roads:

- a. The well site layout, Form C-102 and Exhibit A1 & A2 show the existing area. No additional access roads will be required for this location.
- b. All construction material will be native caliche. It may be available at the proposed location. If unavailable on location or road, caliche will be hauled from nearest BLM approved caliche pit.
- c. No cattle guards, grates or fence cuts will be required.

3. Location of existing wells:

a. See the attached Exhibit B plat showing all wells within a ½ mile radius of the proposed well site.

4. Location of existing and/or proposed production facilities:

See Exhibit B for proposed site of New Gissler Tank Battery Facility on this Federal Lease.

- a. This proposed battery is to be built on the existing Gissler #1 well pad. Our plan is to use as a commingled Grayburg zone and Loco Hills Paddock zone production facility. We request on lease above ground commingling permission for the Grayburg and Loco Hills Paddock zone production for this Federal Lease. The interest is the same for both wells to be produced into this facility. This commingling plan will allow us to conserve land use by not having to construct a separate facility for this Federal Lease. All production will be allocated based periodic individual well tests.

 We will also request like approval from New Mexico Oil Conservation Division.
- b. All surface installed battery equipment will be painted to conform to existing stipulations for this well
- c. The well site will require electricity for the prime mover. We will contact <u>Central Valley Electric Cooperative, Inc.</u> to provide the electric power poles and the electric line from their nearest connection. The routing and pole placement will be provided in their ROW application. All electric installation will be done in accordance with all existing state and federal regulations.
- d. We propose to lay approx. **400' of new 3" PVC flowline** from this new Gissler Loco Hills Paddock well to this new Gissler Tank Battery header. This flowline will be laid above ground along existing road route on this Federal lease. (See Exhibit B & C plat.)

5. Location and Type of Water Supply:

All water to be used in drilling this well will be brine or fresh water transported by truck over existing lease road from Loco Hills, New Mexico or produced water furnished from our existing waterflood facilities in the area. We may install a pump and lay a temporary 2" poly line on the lease from the battery to the rig for this drilling water.

6. Construction Materials:

All construction material for roadway and the drilling pad will be native caliche from the nearest BLM approved pit or from existing available deposits found on the location. All will be in accordance with the drilling stipulations for this well.

7. Methods of Handling Waste Disposal:

- a. Drill cuttings will be disposed of in the lined reserve drilling pit. Auxiliary lined emergency water containment pits may also be necessitated by large volume water flows. All drilling fluids will be allowed to evaporate after completion of drilling. After proper disposal of contents, pits will be back filled, leveled and re-seeded per BLM site stipulations.
- b. Trash, waste paper, garbage and junk will be placed in a portable, screened trash container on location. All trash and debris will be transported to an authorized off-lease disposal station within 30 days following the completion activities.
- c. A properly maintained Porto-john will be provided for the crews during drilling and completion operations. All will be removed after completion operations have ended.
- d. Oil produced during testing will be put into steel storage tank for later sales.
- e. Water produced during testing operations will be put in the lined reserve pit until well is turned to the lease tank battery. All pit contents will be disposed of through one of our approved disposal methods.
- 8. Ancillary Facilities: There are no planned ancillary facilities for this well.

9. Well Site Layout:

- a. Exhibit D shows the relative location and dimensions of the drilling pad and related components. Only minor differences, if any, in length and/or width of the drilling pad are anticipated, depending on which drilling contractor is selected to drill the well. Only minor leveling of the drilling site is anticipated.
- b. All pits will be in accordance with the stipulations for this well. Pit liner will be 6 mils thick polyethylene and will extend over the dike and be anchored in place. Reserve pit will be fenced until empty.

10. Plans for surface Reclamation:

- a. After drilling and successful completion operations are finished, all equipment and other materials not required for normal production operations will be removed. Pits liners will be buried or hauled away. Pits will be backfilled, leveled and re-seeded in accord with the BLM well stipulations.
- b. Any unguarded pits containing fluid will be fence until backfilled.
- c. The pad size will be reduced to the amount required for normal operation of the producing well. This reduced portion will be restored to the BLM stipulations in section a.
- d. If a well is abandoned, the surface location and unneeded road will be restored according to BLM stipulations within 90 days of final abandon and sit re-seeded with BLM (B) seed mix.

11. Surface ownership:

All lands are owned by the U.S. Government and is administered by the Bureau of Land Management. The surface is multiple use with the primary use of the region for the production of oil and gas and the grazing of livestock.

12. Other information:

- a. The area surrounding the well site is grassland. The area is relatively flat with small hills and sand dunes. The topsoil is fine, deep sand underlain by caliche. Vegetation cover is generally sparse and consists of mesquite, yucca, shinnery oak and sparse native grasses. Wildlife in the area includes deer, coyotes, rabbits, rodents, reptiles, dove and quail.
- b. No permanent or live water is found in the general proximity of this area.
- c. No dwellings are found within two (2) miles of this location.
- d. There is intermittent cattle grazing and hunting in the area; however, the principal land use is for oil and gas production.
- e. An archaeological clearance report from <u>Boone Archaeological Services</u> will be sent to the BLM office in Carlsbad, N.M.

13. Bond Coverage:

Current Bond is BLM Bond # NMB000197. The Surety Bond is #B000863. Both are effective May 21, 2004 and remain in place.

14. Operator's Representative:

Burnett Oil Co., Inc. field representative responsible for compliance with the approved surface use and operations plan is:

Mr. Belton Mathews, District Supt.

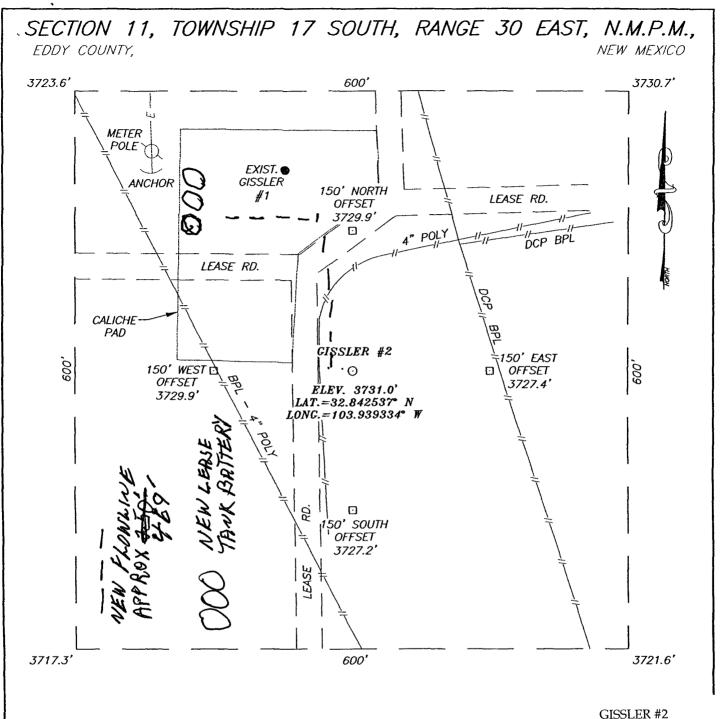
P.O. Box 188

Loco Hills, New Mexico 88255 Office phone: 505-677-2313 Home phone: 505-746-8647 Cellular phone: 505-703-9601

I hereby certify that I, or persons under my direct supervision have inspected the drill site and access route; that I am familiar with the conditions that currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Burnett Oil Co., Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Mark A. Jacoby Engineering Manager

Date:



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY. #82 AND CO. RD. #220, GO NORTH ON CO. RD. #220 APPROX. 2.5 MILES. TURN LEFT AND GO WEST APPROX. 0.7 MILES. TURN LEFT AND GO WEST APPROX. 0.1 MILE. FOLLOW ROAD BEND TO LEFT AND GO APPROX. 0.6 MILES TO THIS LOCATION.



PROVIDING SURVEYING SERVICES
SINCE 1946

JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

SURFACE EXHIBIT A2

100 0		10	0		200	Feet		
Scal	le:1 "=	100'						
BURNETT	01	'L	CC)M	1PA	4NY		
GISSLER #2 LOCATED 330 FEET FROM THE SOUTH LINE AND 1800 FEET FROM THE EAST LINE OF SECTION 11, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.								
Survey Date: 08/10/07	3	Sheet	1	of	1	Sheets		
W.O. Number: 07.11.1049	Dr	By: DSS	5	Re	v 1:/	V/A		
Date: 08/25/07 Disk:		071	1104	9	Scale	1"=100'		

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, (575) 361-2822

- 1. A Hydrogen Sulfide (H2S) Drilling Plan should be activated 500 feet prior to drilling into the **Grayburg** formation. **Measurements between 500-2000 ppm in the gas stream.**
- 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.

B. CASING

- 1. The 10-3/4 inch surface casing shall be set a minimum of 25 feet into the Rustler Anhydrite and above the salt at approximately 380 feet and cemented to the surface.
 - 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.

Possible lost circulation in the Grayburg and San Andres formations. Possible water flows in the Salado and Artesia Groups.

- 2. The minimum required fill of cement behind the 7 inch production casing is:
 - Cement to surface. If cement does not circulate, contact the appropriate BLM office. First stage to circulate.
- 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. 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.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

Engineer on call phone (after hours): Carlsbad: (575) 706-2779

WWI 120707