



### EIGHT WELL WATERFLOOD APPLICATION FOR COG OPERATING LLC PADDOCK FORMATION NORTHWEST QUARTER SECTION 20, T. 17 S., R. 30 E. EDDY COUNTY, NEW MEXICO

LEASE NAME: JENKINS B FEDERAL BLM LEASE NUMBER: NMLC-054988B

Exhibit 7

Prepared by
Permits West, Inc.
Santa Fe, New Mexico
February 16, 2007

### NEW MEXICO OIL CONSERVATION DIVISION



- Engineering Bureau -

ABOVE THIS LINE FOR DIVISION USE ONLY

### ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

1220 South St. Francis Drive, Santa Fe, NM 87505

### **Application Acronyms:**

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]

	[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive	Production Response
[1]	TYPE OF APPLICATION - Check Those Which Apply for [A]  [A] Location - Spacing Unit - Simultaneous Dedication  NSL NSP SD	COG's Jenkins B Federal waterflood
	Check One Only for [B] or [C] [B] Commingling - Storage - Measurement DHC CTB PLC PC OLS OLM	
ð etr	[C] Injection - Disposal - Pressure Increase - Enhanced Oil Reco WFX PMX SWD IPI EOR PPR	very
	[D] Other: Specify	· · ·
[2]	NOTIFICATION REQUIRED TO: - Check Those Which Apply, or _ Doe [A] Working, Royalty or Overriding Royalty Interest Owners	es Not Apply
	[B] Offset Operators, Leaseholders or Surface Owner	

- [C] Application is One Which Requires Published Legal Notice
- [D] Notification and/or Concurrent Approval by BLM or SLO
  U.S. Bureau of Land Management Commissioner of Public Lands, State Land Office
- [E] For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] Waivers are Attached
- [3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.
- [4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

BRIAN WOOD (505) 466-8120 AX 466-9682 Signature

Title

Date

CONSULTANT

2-5-07

e-mail Address

brian@permitswest.com

I. Purpose is to convert eight existing oil wells to water injection wells to increase oil recovery. All eight wells produce from, and all injection will be into, the Paddock member of the Yeso Formation.

II. Operator: COG Operating LLC

(OGRID #229137)

Operator phone number: (432) 685-4340

Operator address: 550 West Texas, Suite 1300

Midland, TX 79701

Contact for Application: Brian Wood (Permits West, Inc.)

Phone: (505) 466-8120

III. A. (1) Lease: BLM lease NMLC-054988B (see Exhibit A for history)

Lease Size: 160.00 acres (see Exhibit A for maps) Lease Area: NW4 Section 20, T. 17 S., R. 30 E.

Well Name & Number, API Number, Location, & Distance to Lease:

Jenkins B Federal	<u>API #</u>	Location (all 20-17s-30e)	Closest Lease Line
#1	30-015-04214	1650 FNL & 330 FWL	330'
#4	30-015-04231	1650 FNL & 1650 FWL	990'
#10	30-015-30668	850 FNL & 2310' FWL	330'
#12	30-015-31559	2310 FNL & 2310 FWL	330'
#13	30-015-31560	2310 FNL & 880 FWL	330'
#14	30-015-32257	745 FNL & 990 FWL	745'
#17R	30-015-34138	330 FNL & 1525 FWL	330'
#18	30-015-34474	330 FNL & 430 FWL	330'

A. (2) Surface casing (8-5/8" and 32# to 13-3/8" and 54#) setting depths range from 417' to 506'. Average depth set is 449'. Cement was circulated to the surface in all eight wells. See attached well bore profiles on Form C-108 and histories for more hole, casing, and cement details.



Intermediate casing (7" and 20# to 8-5/8" and 24#) setting depths range from 1,037' to 3,000'. Average depth set is 1,529'. Cement was circulated to the surface in all eight wells. See attached well bore profiles on Form C-108 and histories for more hole, casing, and cement details.

Production casing (4-1/2" and 11.6# to 5-1/2" and 17#) setting depths range from 4,714' to 6,389'. Average depth set is 4,985'. Cement was circulated to surface in six of the eight wells. The #4 well long string cement top is at 1,624'. The #17R well long string cement top is at 320'. See attached well bore profiles on Form C-108 and histories for more hole, casing, and cement details.

Mechanical integrity of the casing will be assured by hydraulically pressure testing to  $\approx 1,000$  psi.

- A. (3) Tubing in seven of the wells is 2-7/8" J-55 6.5#. The eighth well (#1) has 2-3/8" J-55 4.7#. All eight tubing strings will be internally plastic coated. Setting depths range from 4,642' to 4,888' with an average setting depth of 4,722'. (Disposal intervals will range from \$4,249' to \$4,748'.)
- A. (4) Model R injection packers will be set ≈100' above the highest Paddock perforation. Details are:

/Well	Proposed Packer	Paddock Perforations	Current Tubing Depth
<b>√</b> #1	4,182'	4,282' - 4,737'	4,737'
#4	4,186'	4,286' - 4,637'	4,650'
#10	4,318'	4,418' - 4,667'	4,685'
#12	4,221'	4,321' - 4,748'	4,781'
#13*	4,212'	4,312' - 4,715'	4,741'
·	*Also perforate	ed from 3,106' to 3,402'. Will sq	ueeze this San Andres interval.
#14	4,150'	4,250' - 4,639'	4,642'



<u>Well</u>	Proposed Packer	<u>Perforations</u>	Current Tubing Depth
#17R**	4,168'	4,268' - 4,653'	4,654'
	**Also perforate	ed from 3,018' to 4,044'. Will s	queeze this San Andres interval.
#18***	4,160'	4,260' - 4,630'	4,888'

\*\*\*Also perforated from 5,082' to 6,181' in Blinebry. Will set CIBP at ≈4730' & cap with cement.

- B. (1) Disposal zone will be the dolomite Paddock member of the Yeso Formation (NMOCD pool code number = 96718 (Loco Hills; Paddock)). Fracture gradient is expected to be ≈0.71 psi per foot.
- **B.** (2) Disposal intervals will be the existing perforated zones from  $\approx 4,250$ ' to  $\approx 4,748$ '. None are currently open hole. See attached well bore profiles and histories for more perforation information.
- B. (3) All eight wells were initially drilled (between 1937 and 2006) as oil wells. (The Jenkins B Federal #1 was converted to a salt water disposal well in the San Andres (3,000' 3,258') from 1978 to 1999. That zone has since been plugged off and the well is now a Loco Hills; Paddock oil well.) All eight wells are now oil wells.
- B. (4) The Paddock is the only perforated interval in five of the well bores. Three of the wells (#13, #17R, & #18) have other perforated intervals. The additional perforated intervals in the #13 and #17R are above the Paddock and will be squeezed. The additional perforated interval in the #18 is below the Paddock and a CIBP will be set at ≈4,730' and then capped with ≈20' of cement.
- B. (5) Top of the Paddock varies from ≈4,173' (NWNW Section 20) to ≈4,321' (SENW Section 20) in trend with its monoclinal dip from the northwest to the southeast. Oil has been produced from the Paddock in all eight wells. Over 600 oil wells and over 100 injection wells have been drilled into the Paddock in the New Mexico portion of the Permian Basin.

Bottom of the closest overlying productive zone (Grayburg Jackson; SR-Q-G-SA (pool #28509)) is at  $\approx 4,044$ ' (as measured in the Jenkins B Federal #17R). There will be a 224' interval between the lowest San Andres perforation (4,044') and the highest Paddock injection perforation (4,268') in that well. (All San Andres



perforations (3,018' - 4,044') will be squeezed in that well.) There is a water flood (Case 8418, Order R-7900) of the Grayburg Jackson in the adjacent Section 19.

Top of the closest underlying producing zone (Blinebry) is at  $\approx$ 4,780' as measured in the Jenkins B Federal #18. There is a 150' interval between the lowest injection perforation and the top of the Blinebry as measured in that well. There is a 452' interval between the lowest Paddock perforation and the highest Blinebry perforation in the same well. There are three Blinebry producing wells within the 1/2 mile radius area of review. They are:

COG's Jenkins B Federal #18 (NWNW Section 20) COG's W D McIntyre C #9 (NENE Section 20) Cimarex's Loco Hills 20 Federal Com #1 (NENE Section 20)

- IV. This is not an expansion of an existing injection project. (The Jenkins B Federal #1 was a salt water disposal well in the San Andres (3,000' 3,258') from 1978 to 1999. That zone has since been plugged off and the well is now a Loco Hills; Paddock oil well.)
- V. A map (Exhibit B) showing all 140 existing wells (4 injectors + 120 producers + 16 P & A) within a half mile radius of the northwest quarter of Section 20 is attached.

A map (Exhibit C) showing all 710 existing wells (580 oil, gas, or injectors + 130 P & A) within a two mile radius of the northwest quarter of Section 20 is attached.

Exhibit D shows all leases (all BLM and all T. 17 S., R. 30 E.) within a one half mile radius of the northwest quarter of Section 20. Details on the leases within a one half mile radius are:



LEASE #	<u>LESSEE(S)</u>
NMLC-0 060527	ConocoPhillips
NMNM-086025	BP America
NMLC- 0 028793C	ConocoPhillips
NMLC-0 028793A	ConocoPhillips
NMLC-0 028793A	ConocoPhillips
NMLC- 0 028793C	ConocoPhillips
NMLC-0 054988B	COG
NMLC-0 029342E	ConocoPhillips
NMLC-0 029342C	BP America
NMLC-0 054280	BP, EOG, and Read & Stevens
NMLC-0 057634	EOG and Read & Stevens
NMLC-0 060999	EOG and Read & Stevens
NMNM-0 467932	BP America
	NMLC-0 060527 NMNM-086025 NMLC- 0 028793C NMLC-0 028793A NMLC-0 028793C NMLC- 0 028793C NMLC-0 054988B NMLC-0 029342E NMLC-0 029342C NMLC-0 054280 NMLC-0 057634 NMLC-0 060999

Exhibit E shows all lessors within a two mile radius of Section 20. There are two lessors within the two mile radius. The NM State Land Office is the lessor of Section 16, T. 17 S., R. 30 E. BLM is the lessor of all other sections.

VI. There are 109 existing wells (106 producing oil wells + 3 plugged wells) which are in, or within a half mile of, the northwest quarter of Section 20 and penetrated the Paddock or were drilled at least 4,173' deep (shallowest top of the Paddock as found in the #14).

Schematics showing the plugging details and histories of the three P & A wells are in Exhibit F. All three wells were cemented to within at least 1,100' of the surface. The three P & A wells and their distances from the northwest quarter of Section 20 are:

<b>OPERATOR</b>	<u>WELL</u>	API 30-015-	<u>SPUD</u>	T. 17 S., R. 30 E.	<b>DISTANCE</b>	. <u>TD</u>
ARCO	McIntyre Fed. 8	-23265	1980	NESW Sec. 17	1,650'	11,244'
Mack	McIntyre A 10	-23382	1980	SWSE Sec. 20	1,686'	4,700'
Mack	McIntyre A 4	-04222	1961	NESE Sec. 20	2,439'	6,857

There are two proposed approved wells (both Cimarex) within a half mile



of the northwest quarter of Section 20 which will penetrate the Paddock.

Tabulated data (sorted from lowest API number to highest) for each of the 111 existing or proposed wells are in Exhibit G.

- VII. 1. Average injection rate will be ≈500 bwpd per well.

  Maximum injection rate will be ≈500 bwpd per well.
  - 2. System will be closed (COG will lay 2" 4" fiberglass pipelines). New facilities will include a 1,000 barrel skim tank, two 750 barrel suction tanks, 2 horizontal pumps, and 1 centrifugal pump.
  - 3. Average surface injection pressure will be ≈1,500 psi

    Maximum\_surface injection pressure will be ≈2,500 psi
  - 4. Water source will be existing and future COG Grayburg San Andres, Paddock, and Blinebry wells in the northwest quarter of Section 20. A summary of an analysis from the tank battery follows. The complete analysis is in Exhibit H. The analyzed water was a sample from the commingled water produced from the Grayburg San Andres (≈15% of the total battery water), Paddock (≈80%), and Blinebry (≈5%).

Anion/Cation Ratio	1.0
Bicarbonate	105.1 mg/l
Calcium	5,467.0 mg/l
Chloride	106,917.0 mg/l
Conductivity	332,500.0 micro-ohms/cm
Density	1.124 g/cm <sup>3</sup>
Hydrogen Sulfide	42.0 meq/l
lron	1.2 mg/l
Magnesium	976.0 mg/l
Manganese	0.4 mg/l
pН	7.0
Resistivity	0.0301 ohm meter
Sodium	62,520.5 mg/l
Sulfate	2,650.0 mg/l
Total Dissolved Solids	178,637.2 mg/l



**5.** The Paddock currently produces in the northwest quarter of Section 20 and all surrounding quarter sections (see Exhibit I). It is the goal of the project to increase production from the Paddock. According to NMOCD records, at least 769 wells have targeted or will target the Paddock in New Mexico.

VIII. The Paddock member of the Yeso formation is an anhydritic dolomite. The top of the Paddock is a defined by the silty Glorieta dolomite. The base of the Paddock is defined by siltstones at the top of the Blinebry member of the Yeso Formation.

The Glorieta is  $\approx 70'$  thick and is composed of interbedded dolomite and siltstone. The siltstones occur in  $\approx 2'$  to  $\approx 8'$  thick beds with low ( $\leq 5\%$ ) porosity and low permeability. The siltstone beds are separated by  $\approx 2'$  to  $\approx 10'$  thick beds of dolomite. The dolomite beds usually do not exceed 3% porosity and also have low permeability. The Glorieta is not productive within the 1/2 mile radius area of review. Within the Paddock, the siltstones are considered flow unit boundaries. The base of the Glorieta is a siltstone and is also considered a flow unit boundary. The Glorieta siltstone and dolomite beds will confine the waterflood to the Paddock.

The Paddock is comprised of numerous stacked cycles of fine to medium grained dolomites deposited on a marine shelf. Effective porosity is reduced by secondary anhydrite deposited during a post depositional diagenetic event. There is typically  $\approx 80$ ' to  $\approx 100$ ' of very tight (near zero porosity) dolomite and then  $\approx 150$ ' of 1-2% dolomite between the bottom of the Paddock porosity and the top of the Blinebry porosity. There are no perforations in this  $\approx 250$ ' interval in the 1/2 mile radius area of review.

The Paddock is 530' thick (4,250' to 4,780') in the Jenkins B Federal 18 well (see log (Exhibit J)). Formation tops in the Jenkins B Federal #18 are:

Quaternary = 0' Salado = 505' Yates = 1,100' Seven Rivers = 1,394' Queen = 2,016'



Grayburg = 2,400'
San Andres = 2,738'
Glorieta = 4,183'
Paddock = 4,250'
Blinebry = 4,780'
Tubb = not recorded
Drinkard = 5,984'
Total Depth: 6,401'
(projected depths)
Abo = 6,600'
Wolfcamp = 8,200'
Atoka = 10,200'
Morrow = 10,800'

There are no water wells within a two mile radius. This conclusion is based on a field inspection, interviews with local workers, and a review of the State Engineer's records. Domestic water used in Loco Hills is piped ≈10 miles from Maljamar.

No existing underground drinking water sources are above or below the Paddock within a two mile radius. There will be >3,500' of vertical separation and ≈500' salt interval between the bottom of the only likely underground water source (Quaternary) and the top of the Paddock.

Produced water has been disposed (COG's Jenkins B Federal #1 in SWNW Section 20) or injected (Marbob's Burch Keely Unit #97 and #98 wells in NESE Section 19) above the Paddock and within a half mile of the northwest quarter of Section 20.

IX. The wells will each be stimulated with  $\approx$ 5,000 gallons 15% NEFE HCl to clean out scale or fill.



X. The following Schlumberger Platform Express logs have been provided to the NMOCD.

Logs	ear Run	<u>Well</u>
Azimuth Laterolog Micro - CFL/NGT	99	#1
Three Detector Litho-Density Compensated Neutron/NGT		
None	pudded 1937)	#4
Azimuth Laterolog  Micro - CFL/NGT  Three Detector Litho-Density  Compensated Neutron/NGT	999	#10
Azimuth Laterolog Micro - CFL/NGT Three Detector Litho-Density	001	#12
Compensated Neutron/NGT		
Azimuth Laterolog Micro - CFL/NGT Three Detector Litho-Density Compensated Neutron/NGT	001	#13
Azimuth Laterolog Micro - CFL/NGT Three Detector Litho-Density Compensated Neutron/NGT	02	#14



<u>Well</u>	<u>Year Run</u>	<u>Logs</u>
#17R	2005 & 2006	Azimuth Laterolog Micro - CFL/HNGS Three Detector Litho-Density Compensated Neutron/HNGS FMI-HALS-HNGS Perforating CBL - Variable Density GR/CAL
#18	2006	Azimuth Laterolog Micro - CFL/HNGS Three Detector Litho-Density Compensated Neutron/HNGS

- XI. Based on a field inspection, conversations with local workers, and a review of the State Engineer's records; there are no water wells within a one mile radius of the northwest quarter of Section 20.
- XII. COG is not aware of any geologic or engineering data which may indicate the Paddock is in hydrologic connection with any underground sources of water. Indeed, no underground sources have been developed within a two mile radius. Over 100 injection or salt water disposal wells have been drilled into the Paddock in the New Mexico portion of the Permian Basin. Previously approved Paddock waterfloods include:

<u>Case</u>	<u>Order</u>	<u>Date</u>	Township & Range
3467	R-3124	1966	16s-36e et al
3616	R-3273	1967	21s-37e et al
3692	R-3352	1967	16s-36e et al
10549	R-9741	1992	16s-36e et al



XIII. Notice (this application) has been sent (Exhibit K) to the surface owner (BLM), operators of all active wells which have penetrated (COG and Marbob) the Paddock, operators of any approved proposed wells which will penetrate (Cimarex) the Paddock, lessees of record according to BLM (BP, COG, ConocoPhillips, EOG, and Read & Stevens), and lessors (only BLM) within a half mile of the northwest quarter of Section 20.

A legal ad (see Exhibit L) was published on December 19, 2006.



Side 1

OPERATOR: COG OPERATING LLC.

WELL NAME & NUMBER: JENKINS B FEDERAL #1

WELL LOCATION:

FOOTAGE LOCATION 1650'FNL & 330'FWL

Jenkins B Federal #1

1650FNL & 330FWL Sec 20, T175, R30E ELEV? TD: 3,258' (initial) 4,788' (current) PBTD: 3,258' (initial) 4,766' (current) DV TOOL: 3826' (drilled out)

WELLBORE SCHEMATIC

E UNIT LETTER

TOWNSHIP SECTION

30 E RANGE

WELL CONSTRUCTION DATA

Surface Casing

Casing Size: 10-3/4"

Cemented with: 50 sx

Top of Cement:

10 3/4" 40# @ 479", Circ w/ 50 sks

Hole Size: 12-1/4"

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Method Determined:

Intermediate Casing

ff3

(Perforated)

Method Determined: Calculated Method Determined: Logged Casing Size: 4-1/2" 4736.5 feet Casing Size: 7" Production Casing Injection Interval 5 or or 4282 feet Top of Cement: Surface Cemented with: 275 sx Cemented with: 100 sx Top of Cement: 1,200' Total Depth: 4786' Hole Size: 8-1/2" Hole Size: 6-1/4" 4-1/2" 11.6#, J-55 @ 4,786°, 1st stg 125 sks (circ 47 sacks off DV) 2nd C/w 150sacks to tie back into 7in. csg at approx 2,500' 7" 24# @ 3,000', Circ w/ 100 sks Bottom Perf @ 4,736.5 2-3/8", J-55 @ 4,737" Top Perf @ 4,282.5 Company 15

ft<sup>3</sup>

## INJECTION WELL DATA SHEET

Lining Material: PLASTIC Tubing Size: 2-7/8"

Type of Packer: MODEL R INJECTION PACKER

Packer Setting Depth: APPROXIMATELY 100' ABOVE HIGHEST PERFORATION

Other Type of Tubing/Casing Seal (if applicable):

### Additional Data

If no, for what purpose was the well originally drilled? OIL PRODUCTION Yes Is this a new well drilled for injection?

X No

Name of the Injection Formation: PADDOCK MEMBER OF THE YESO FORMATION ri

Name of Field or Pool (if applicable): LOCO HILLS; PADDOCK (#96718) ж :

Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. YES OUEEN/SAN ANDRES (OPEN HOLE 3000' – 3258'); LATER CEMENTED ACROSS WHEN WELI

OVER: GRAYBURG JACKSON; SR-Q-SA-G-SA (BOTTOM @ 4,044' IN JENKINS B FEDERAL #17) Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: 5

UNDER: BLINEBRY (TOP @ 4,780' IN JENKINS B FEDERAL #18)

### Well: Jenkins B Federal # 1

1650'FNL & 330'FWL Sec 20, T17S, R30E

ELEV:?

TD: 3,258' (initial) 4,788' (current)

**DF:** ?

PBTD: 3,258' (initial) 4,766' (current)

**KB:** ?

DV TOOL: 3826' (drilled out) Pumping Unit: Lufkin 228

Casing

ТҮРЕ	SIZE, in	WEIGHT, lbs/ft	GRADE	TOP	воттом	CEMENT
SURFACE	10-3/4	40#	?	SURFACE	479'	Circ w/ 50 sks
INTERMEDIATE	7	24#	?	SURFACE	3,000'	Circ w/ 100 sks
PROD. LINER	4-1/2	11.6#	J-55	SURFACE	4,786'	1st stage 125 sks ( circ 47 sacks off DV) 2nd C/w 150sacks to tie back into 7in. csg at approx 2,500'
PROD. LINER	2-3/8		J-55	SURFACE	4,737'	
RODS	3/4			SURFACE	188 rods & 2' pony	

**PERFS:** 

OPEN HOLE 3000-3258

4282.5,84,86,88,93,95,4300,05,13.5,15,19,28,35,37,39,43,45,48,53.5,58,6 1.5,63.5,65.5,69,71,73,75,80,83,85,4408,10,16,27.5,44,48,50,70.5,72,75,7 8,81,83,85,90,91,4502,04,05.5,08,10,12,14,15.5,17,18.5,21,23,24.5,26.5,2 7.5,30,31.5,35,36,37,39,41,44,46,49.5,53,55,58,60,62,65,75.5,77.5,85,87.5 90,4602.5,04,06,08,11,13,24,26,28,30,34,36,40,44,46,49,58,61.5,64.5,83, 84.5,90,92,95,4701.5,04,06.5,11,13,30.5,36.5

**02/25/1936**- Acidized open hole w/3000 gals acid. 75 BOPD before and 200 BOPD After.

05/31/1956- Frac open hole from 3000-3258 w/19000 gals oil and 290sx sand.

**04/14/1978-** 1" Down backside of 8 5/8" csg w/22sx Class C cmt. No details on 8-5/8 caisning

**04/1978-** Production ends on the Queens/San Andres totaling 69,768 bbls oil & 16,973 MCF gas

**04/19/1978-** Ran in hole w/2 3/8" Salta lined tbg and guiberson shorty tension pkr. Landed pkr at 2881'. Put well on Injection.

12/15/1986- Rigged up. Pulled out hole w/tbg and pkr. Ran in hole w/RBP and tested csg to 200#. Ran Cmt bond log and found TOC at 1200'. Perfed csg at 1160'. Squeezed perfs

w/200sx Class C Cmt. Perfed csg at 450'. Squeezed Perfs w/225sx Class C. Drilled out cmt and Tested csg to 700# Held ok. Ran in hole w/2-3/8" salta lined tbg and landed tbg at 2910'. Tested csg to 250# Held OK. Put well back on Injection.

04/07/1995- Tested tubing for holes, replaced 1 joint

07/30/1999- RIH w/ 6-1/4 tooth bit, cleaned out hole and drilled to new TD of 4,788'

**08/13/1999-**RU Schlumberger & log &perf. 4282.4-4736.5 113 holes. RD Schlumberger.

**08/16/1999-**RIH w/5 1/2" PPI tool & acidize w/2500 gals 15% NEFE Breakdown @ 1535# Avg. Rate 6.6 bpm Avg. Psi 1675# ISIP 812# 5 min. 465# 10 min. 208# 15 min. 119#. Balled off 5000#. Rev. out & PPI perfs. POH w/PPI Tool & RIH w/5 1/2" RTTS.

**08/17/1999**-Pump hot acid job. 32,000 gals heated 20% HCL & 54,000 gals heated 40# gel in 25 & 41 bbl stages. Dropped 1000# block & 120 balls in 10 stages. Avg. Rate9 bpm Avg. Psi 1775# ISIP 950# 5 min. 777# 10 min. 739# 15 min. 700#. Pump 5000 gals cold 15% HCL @ 2 bpm @ 758#. Flush w/90 bbls FWf @ 2 bpm @ 545#/ ISIP 485# 5 min. 441# 10 min. 403# 15 min. 365#.

**08/18/1999**-RIH clean out to PBTD @ 4766'. POH lay down workstring. RIH w/new 2 3/8" J-55 tbg. Land SN @ 4737' w/159 jts & 8' sub on top. TA @ 4110 w/138 jts. RIH w/2x1 1/2x16/ RHBC HVR PAP BNC pump. Start in hole w/use type 97 WCN rods.

**08/19/1999**-Finish running rods. 188-3/4" rods & 2' pony. space out, clean up move off, Rig up Lufkin 228 pumping unit, put to pumping to pit in afternoon.

9/99- Production begins on the Paddock

02/2006- Production totals of the Paddock 66,001 bbls oil & 201,987 MCF gas

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Octob	•	r	1990)

SUBMIT IN "PLICATE" **-UNITED STATES** 

FOR APPROVED OMB NO. 1004-0137 Expires: December 31,1991

9/21/99

	DE		<i>i</i> ment Eau of La				8	11 02 10	1951 (1951) 1951 (1951) 1 <del>8210-20</del>	Į.	LC-0	TION AND SERIAL NO.
WELL CO	OMPLE	TION	OR REC	OMPL	ETION		PORT	ND L	OG*	6. IF INDIA	N, ALLO	OTTEE OR TRIBE NAME
b. TYPE OF COM	IPLETION:			· [] _	DRY [	Other	(0) 12	22324	250	7. UNIT AG	REEME	NT NAME
WELL	WORK D	DEEPEN	PLUG BACK		IFF. ESVR.	orme	? 	<u> </u>	<u> </u>	8. FARM	OR LEA	ASE NAME, WELL NO
2. NAME OF OPERAT	OR V					167	Č,	F 1779	00 \	Jenk	cins E	Federal #1
Mack Energy (						151	DOREC	FILL	8	9. API WEL	L NO.	20
P.O. Box 960,	Artesia,	NM 882					48-1288		7. E.O.			5-04214 5
4. LOCATION OF V	VELL (Rep	ort location	clearly and it					nts)*	34/	Loc	o Hil	ls Paddock
At surface	,			. '	1650 F	NL 338	TAM'E	1002	ر کانی			OR BLOCK AND SURVEY
At top prod. inte	rval report	woied be			1650 F		) LAAF -	1997		ORAR	EA	
At total depth		* 1			1650 F	NL 330				1		T17S R30E
				14. PERM	IT NO.		I DAT	E ISSUED		12. COUNT PARISH Edi		NM
7/31/99	16. DATE T.0	. REACHED /5/99	17. DATE	8/19		5.)	18. ELEV		RKB, RT, GI	R, ETC.)*	19. E	S651
20. TOTAL DEPTH, MD 8	TVD	21, PLUG, B	4766'	TVD	22. IF MUL HOW N		MPL.		ERVALS	ROTARY TO		CABLE TOOLS
24. PRODUCING INTE	RVAL (S), (	OF THIS CO	MPLETION - T	ор, вотто	M, NAME	(MD ANI	TVD)*				25.	. WAS DIRECTIONAL SURVEY MADE
			4282	.5 <b>' -</b> 473	6.5', Pa	addoc	k					Yes
26. TYPE ELECTRIC			utron, De	nsity, L	ateralo	g, Spe	ctral Ga	ımma F	Ray		27. V	VAS WELL CORED
28,	···		CA	SING RE	CORD (	Report a	II strings se	t in wall)			·	
CASING SIZE/GRADE	WEIGH	IT, LB./FT	DEPTH	SET (MD)	Н	OLE SIZE		TOP OF C		ENTING RECOR	D	AMOUNT PULLED
10 3/4"		40		79'		12 1/4			50s:			None
7" 4 1/2"		24 11.6		86' 86'	_	8 1/2 6 1/4			100s 275s			None None
<del></del>		<del></del>			<u> </u>							
29.			ER RECORD	7			· · · · · · · · · · · · · · · · · · ·	30.		UBING REC		
SIZE	TOP(M	5)	BOTTOM (MD)	SACKS		SCR	EN (MD)	SIZ. 2 3		DEPTH SET	(MD)	PACKER SET (MD)
			ACCEPT	HD EC	A REC	CSC			0/0	4737		
31. PERFORATION R	ECORD (Int	erval, size	ind number)			32.	Α.	CID. SHO	T. FRACT	URE, CEME	VT SQL	JEEZE, ETC
			SF	P 2 3	loca	DEP	TH INTERV					ATERIAL USED
	•			. ~ 0	CACT T	42	82.5' - 4	736.5'		2500 ga	ls 15	% NEFE
					001	42	82.5' - 4	736.5'		32,000 g	als 2	0% HCL
	4282.	5' - 4736	<del>:5', 113</del>			$\dashv$			1			<u> </u>
33.				•	PRO	DUCTIO	N			······		
DATE FIRST PRODUCT 9/3/199	_	PRODUCT	TON METHOD (A	lowing, gas l 2 x 1 1/2	ft, pumping 2 x 16'	- size and RHBC	type of pump)	AP BNC	;	WELL S shut-ir		Producing or Producing
DATE OF TEST	HOURS TE	STED	CHOKE SIZE		N FOR PERIOD	OIL-8B	L.	GAS-M	CF.	WATER-BB	L.	GAS-OIL RATIO
9/19/1999	2	4					99	1	95	405		1969 <sup>-</sup>
FLOW. TUBING PRESS.	CASING P	RESSURE	CALCULATE 24-HOUR RA	D OIL-	99		3AS-MCF. 195	 5	WATER -	88L. 05	OIL GRA	38
34. DISPOSITION OF	GAS (Sold	used for fu	el, vented, etc.	)		Sold			<del></del>			
35. LIST OF ATTACH	MENTS								,			
36. I hereby certify	hat the fo	regeing an	djattached ir	formation	is comp	lete and	l correct a	s determi	ned from :	all available	record	5

\*(See Instructions and spaces for Additional Data on Reverse Side)

**Production Analyst** 

ck 4272 4667	Iccovenes).						
MEASDEPTH  AUSTICATION  AUTOMOTICAL  AUTOMOT	FORMATION	dO.I.	BOTTOM	DESCRIPTION, CONTENTS, ETC.	2		ОР
San Andres Glorietta Glorietta	Hills Paddock	4272	4667			MEAS.DEPTH	TRUE VERT.DEPTH
San Andres Glorietta Glorietta		i			Ónecu	· .	
Clorietta					San Andres		
					Glorietta	4190	
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U. S. LAND OFFICE LASE CYTHES SEELL NUMBER 054988 D LEASE OR PERMIT TO PROGRECT JENLINS

UNITED STATES DEPARTMENT OF THE INTERIOR

### GEOLOGICAL SURVEY

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### HISTORY OF OIL OR GAS WELL..

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Control of the between

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 AUTHORIZATIO	N TO INJECT -	<u>- JENKINS B FE</u>	DERAL #4 (API# 30	<u>-015-04231)</u>
	PURPOSE: X Secondary Recovery Application qualifies for administrative approval?	Pressure Mai		Disposal X No	Storage
II.	OPERATOR: COG OPERATING LLC				
	ADDRESS: 550 WEST TEXAS AVE., SUITE 13	00, MIDLAND,	TX 79701	· .	
	CONTACT PARTY: GAYLE BURLESON	PHONE:	(432) 685-4340	·	
m.	WELL DATA: Complete the data required on the Additional sheets may be attached		is form for each w	rell proposed for injec	tion.
IV.	Is this an expansion of an existing project?  If yes, give the Division order number authorizing	Yes the project:	X No		
V.	Attach a map that identifies all wells and leases wi drawn around each proposed injection well. This				half mile radius circle
VI.	Attach a tabulation of data on all wells of public re Such data shall include a description of each well's schematic of any plugged well illustrating all plugged	s type, constructio			
VII.	Attach data on the proposed operation, including:			· .	. ,
	<ol> <li>Proposed average and maximum daily rate and</li> <li>Whether the system is open or closed;</li> <li>Proposed average and maximum injection pres</li> <li>Sources and an appropriate analysis of injection produced water; and,</li> <li>If injection is for disposal purposes into a zone chemical analysis of the disposal zone formation wells, etc.).</li> </ol>	ssure; on fluid and compa	atibility with the re	ithin one mile of the p	proposed well, attach a
*VIII.	Attach appropriate geologic data on the injection a depth. Give the geologic name, and depth to botto total dissolved solids concentrations of 10,000 mg known to be immediately underlying the injection	om of all undergro g/l or less) overlyi	ound sources of dri	nking water (aquifers	containing waters wit
IX.	Describe the proposed stimulation program, if any				
*X.	Attach appropriate logging and test data on the we	ll. (If well logs h	ave been filed with	h the Division, they no	eed not be resubmitted
*XI.	Attach a chemical analysis of fresh water from two injection or disposal well showing location of wells			able and producing) w	ithin one mile of any
XII.	Applicants for disposal wells must make an affirm data and find no evidence of open faults or any otl sources of drinking water.				
XIII.	Applicants must complete the "Proof of Notice" se	ection on the rever	rse side of this for	n.	
XIV.	Certification: I hereby certify that the information and belief.	submitted with th	is application is tr	ue and correct to the	pest of my knowledge
	NAME: BRIAN WOOD	.)		TITLE: CO	NSULTANT
	SIGNATURE:	VOW (		DATE: <u>FEB</u>	. 5, 2007
*	E-MAIL ADDRESS: <u>brian@permitswest.com</u> If the information required under Sections VI, VIII Please show the date and circumstances of the earli		e has been previou	sly submitted, it need	not be resubmitted.



- 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.

# OPERATOR: COG OPERATING LLC

WELL NAME & NUMBER: JENKINS B FEDERAL #4

WELL LOCATION:

1650' FNL & 1650' FWL FOOTAGE LOCATION

 $\frac{E}{UNIT}$  LETTER

17 S  $\frac{20}{\text{SECTION}}$ 

TOWNSHIP

30 E RANGE

WELLBORE SCHEMATIC

Jenkins B Federal #4 Sec

WELL CONSTRUCTION DATA Surface Casing

Casing Size: 8-5/8"

or

Cemented with: 50 sx

Hole Size: 12-1/4"

Method Determined:

Intermediate Casing

Top of Cement:

Casing Size: 7"

or

Cemented with: 100 sx

7" 20# @ 2,843, Circ w/ 100 sks

Hole Size: 7-7/8"

Method Determined:

Production Casing

Top of Cement:

Hole Size: 6-1/8"

Top Perf @ 4,286

DV Tool @ 3,996

Casing Size: 4-1/2"

Cemented with: 350 sx

£3

or

Method Determined: Logged

Top of Cement: 1,624'

Total Depth: 4788?

2-3/8", 1-55 @ 4,650

Bottom Perf @ 4,637

Injection Interval

4637 feet t0 4286 feet

(Perforated)

## INJECTION WELL DATA SHEET

PLASTIC
Material:
Lining
2-7/8"
Size:
bing

Type of Packer: MODEL R INJECTION PACKER

Packer Setting Depth: APPROXIMATELY 100' ABOVE HIGHEST PERFORATION

Other Type of Tubing/Casing Seal (if applicable):

### Additional Data

1. Is this a new well drilled for injection?

If no, for what purpose was the well originally drilled?  $\overline{OIL\ PRODUCTION}$ 

- Name of the Injection Formation: PADDOCK MEMBER OF THE YESO FORMATION
- Name of Field or Pool (if applicable): LOCO HILLS; PADDOCK (#96718)
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. YES

QUEEN/SAN ANDRES (OPEN HOLE 2843' – 3253'); LATER CEMENTED WHEN WELL DEEPENED

Give the name and depths of any oil or gas zones underlying or overlying the proposed njection zone in this area: Ś.

OVER: GRAYBURG JACKSON; SR-Q-SA-G-SA (BOTTOM @ 4,044' IN JENKINS B FEDERAL #17) UNDER: BLINEBRY (TOP @ 4,780' IN JENKINS B FEDERAL #18) Well: Jenkins B Federal # 4

1650'FNL & 1650'FWL Sec 20, T17S, R30E

ELEV: 3,649'

TD: 4,815' (current)

**DF:** ?

**PBTD: 4,776' (current)** 

**KB:** ?

DV TOOL: 3949' Pumping Unit: ?

Casing

ТҮРЕ	SIZE, in	WEIGHT, lbs/ft	GRADE	ТОР	воттом	CEMENT
SURFACE	8-5/8	32#	?	SURFACE	506'	Circ w/ 50 sks
INTERMEDIATE	7	20#	?	SURFACE	2,843'	Circ w/ 100 sks
PROD. LINER	4-1/2	11.6#	J-55	SURFACE	4.788'	circ/w 1st stage 100sx circ. 2nd stage 250 sx. TOC @ 1,624'
PROD. LINER	2-7/8		J-55	SURFACE	4,650'	1,041

**PERFS:** 

OPEN HOLE 2843-3253

4286,90,93,99,4370,87,89,4406,14,47,51,56,59,81,89,94,4514,30,34,39,48

,54,62,72,73,80,88,92,96,4607,12,16,26,

4629,4637

**5/14/37-** Acidized w/1000 gals acid. Pumped 150 BOPD.

11/29/55- Frac open hole w/10000 gals oil and 250sx sand. Well pumped 135 BOPD

**01/97-** Production ends in the Queen/San Andres totaling, 85,875 bbls oil & 74,431 MCF gas

**01/22/1997-** Drill out DV tool @ 3993' in 20 min. RIH & tag bottom @ 4767'. POH & laydown drill collars. RU HLS & run bond & correlation log. TOC @ 1624'. Perforate 4286-4637'.

01/23/1997- RIH w/ 4 1/2" RTTS & acidize w/2000 gals 15% NEFE acid. Breakdown @ 2400-2100#. Avg. rate 6.3 bpm Max 6.6 bpm Avg. psi 2180# Max 2700# ISIP 1200#. 5 min. 900# 10 min. 810# 15 min. 750#. Balled off to 5500#. RU & pull 13 swab runs. 12th run tagged @ 2300' & pulled from 4000' w/20% oil cut. Frac balls floating & couldn't get down w/swab. RIH & wash balls. Reset Pkr. & prep for Hot acit job.

**01/24/1997-** RU BJ & pump big hot acid job. 54,000 gals heatedf 40# gel, 32,000 gals heated 20% HCL acid, 5000 gals cold 15% HCL & 5000 gals fresh water flush. Block #1 50# 3 balls 41# inc. #2 50# 3 balls 30# inc. #3 50# 3 balls 30# inc. #4 50# 3 balls 30# inc. #6 50# 3 balls 50# inc. Avg. rate 6bpm Avg. psi 1839# ISIP

1085# 5 min. 1056 10 min. 1027 15 min. 1007#. 5000 gals 15% cold acid Avg. rate 2 bpm Avg. psi 1100# ISIP 1007# 5 min. 1007# 10 min. 998 a5 min. 978.

**01/27/1997**- RIH & wash block & balls off bottom. POH & laydown workstring. PU 148 jts. new 2 7/8" J-55 tbg. & land SN @ 4650'. RIH w/2 1/2x2x20' PAP HVR pump, 128 7/8" used rods & 58 1" used rods.

**10/28/1997-** PPI perfs w/5000 gals 15% Pentafax 2. All perfs were broke down. Release PPI Tool & laydown workstring.

**10/29/1997**- RIH w/same prod. tbg. Reland SN @ 4650' w/148 jts 2 7/8" J-55 tbg. RIH w/128-7/8" & 58-1" used rods. 2 1/2x2x20' PAP trash pump.

**01/12/1998-** Downsize rod string. Laydown 1" & 7/8" rods. Stand back 59 7/8" rods. RIH w/2 1/2x2x20' Brass Ni Carb pump. 59- 7/8 & 125 3/4" new type 97 WCN rods.

09/02/2003- MIRU well has hole in tubing, POH pump and rods, POH with tubing, 12' up from SN had hole caused by bacteria will put chemical in well, replace btm jt. run back in hole 148jts 2 7/8" tubing, run 2 1/2 x 1 1/2 x 16' Brass Nicarb pump, 124-3/4" rods, 59-7/8" rods space out with 4' pony x 7/8" load tubing put well back to btry, clean up rig down.

**01/11/2005**- Rig up unit 93 and pull pump out of hole. PTOH, found hole on bottom jt.. Replace with ceramic lined jt. and RTIH. Land SN in same place with 148 jts. 2 7/8. Ran in hole with 2 1/2"x1 1/2"x16' RHBC, 2'x3/4" pony, 125-3/4" rods, 59-7/8" rods, 6',4',4' ponies. Hang on and rig down.

2/97- Production begins in the Paddock

02/06- Production totals of the Paddock 105,460 bbls oil & 229,051 MCF gas

Form 3	160-4
(October	1990

### **LATED STATES**

SUBMIT IN DUF. ATE\*
(See other instruction on

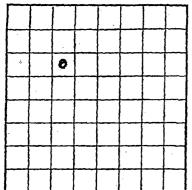
FOR APPROVED OMB NO. 1004-0137 Expires: December 31,1991

5.	LEASE	DESIG	NATION	AND	SERIAL
		IC	J05409	OOD	

		BUREAU OF L				K	rev	erse side)		GNATION AP C-054988	ND SERIAL NO
WELLC	OMPLETIO	N OR REC	OMPLE	ETION	REPOR	TAI	ND LC	G *	6. IF INDIAN,	ALLOTTEE O	R TRIBE NAM
b. TYPE OF COM	(iPLETION:	OIL GAS WELL WELL  DEFEN PLUG BACK		DRY	Other N.M. OH	ිට්	ns. Di	yişion	7. UNIT AGRE		
WELL L		BACH	CLI R	ESVR.	-811"\$ <b>-33</b>			₩區	H-331	S B FEDE	
Mack Energy					Artesia, N	M 8	38210-	2834	9. API WELL N		17.75 11.4
3. ADDRESS AND	TELEPHONE N		· · · · · · · · · · · · · · · · · · ·	*************		EE	D 2 4	1007	30	-015-0423	31 -
P.O. Box 960,					505) 748-1	288-	0 44	1997	IO. FIELD AND	=	
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15. DATE SPUDDED 1/10/97	16. DATE T.D. REAC		COMPL (Re 1/27		) 18. E	LEVATI	IONS (DF, F	KB, RT, GR	, ETC.)* 1	I9. ELEV. CASII	NG HEAD
20. TOTAL DEPTH, MD 4815	3	UG, BACK T.D., MD & 4776	TVD	22. IF MULT HOW M	TIPLE COMPL.,		23. INTE	RVALS LED BY	ROTARY TOOLS	5 CAB	BLE TOOLS
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SIZE	TOP(MD)	BOTTOM (MD)	SACKS C	EMENT	SCREEN (MD	)	SIZE		DEPTH SET (MD)	PACKE	R SET (MD)
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31. PERFORATION R	ECORD (Interval,	size and number)	<u> </u>		32.	A C II	n SHOT	EPACTI	IRE, CEMENT	SOUEEZE 1	ETC
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	4286-463	37, 1/2, 35								<del></del>	
33.			·····	PROC	DUCTION						
DATE FIRST PRODUC 2/4/97	1	оистіон метнов ( <i>F</i> Р	lowing, gas lift Pumping	t, pumping - 2 1/	size and type of pe 2 x 2 20 P	ump) AP H	ivr		WELL STATI shut-in)	US ( <i>Producing</i> o <b>Produ</b>	
2/12/97	HOURS TESTED	CHOKE SIZE	PROD'N TEST P		OIL-BBL. 80		GAS-MCI	. 1	WATER-BBL.	I	IL RATIO 400
FLOW. TUBING PRESS	CASING PRESSU	RE CALCULATE		BBL. 80	GAS-M	CF. 112		WATER - I	BBL. OIL	GRAVITY-API	(CORR.)
34. DISPOSITION OF	GAS (Sold, used )	or fuel, vented, etc.	)		iold				PTED FOR F		
35. LIST OF ATTACH	MENTS			Well	Report		(O)	IG SC	D DAYII	357 G.A	198
36. I hereby certify	that the foregoin	g and attached in		is compl	ete and corre			l 1		ords	
SIGNED	Kusz -12	. allo	TIT <u>ب</u>	LE	Prod	uctio	n Cleri		DATE	2/18	197

et Bureau No. 42-R355.2, oval expires 12-31-52.

Form 9-220



LOCATE WELL CORRECTLY

U. S. LAND OFFICE LAS Cruces SERIAL NUMBER 054988 B LEASE OR PERMIT TO PROSPECT Jenkins

### UNITED STATES DEPARTMENT OF THE INTERIOR **GEOLOGICAL SURVEY**

LOG OF OIL OR GAS WELL

Company Flint Production Company, Inc. Address Artesia, New Mexico Lessor or Tract Jenkins Field Grayburg State New Mexico Well No. 4-B Sec. 20 T. 17 R. 30 Meridian NAPM County Eddy Location 1650ft. S. of N Line and 1650ft. E. of W Line of Section 20 Elevation Courter foot relative The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records. Signed \_\_ Date May 18, 1937 Title The summary on this page is for the condition of the well at above date. Commenced drilling March 9 19 37 Finished drilling May 10 19 37 OIL OR GAS SANDS OR ZONES (Denote gas by G) No. 4, from 2632 to 2636 G. S. No. 1, from 1555 to 1557 G. S. 2716 G.S. 2712 No. 2, from 1570 to 1575 G. S. No. 5, from ... 2905 2912 G. S. No. 3, from 2590 to 2595 G. S. to -3127 011 No. 6, from .... 3098 IMPORTANT WATER SANDS 3222 3229 011 to \_\_\_\_\_\_ No. 3, from \_\_\_\_\_\_ to \_\_\_\_\_ No. 2, from CASING RECORD Threads per inch Amount Kind of shoe Cut and pulled from or Wat 1 10.506 Regular MUDDING AND CEMENTING RECORD Size Where set Number sacks of cement alethod used Mud gravity Amount of mud used Top to Botton 81n 506 Hall iburton Heavy

Halliburton

Heavy

Top to Bottom

MARK
FOLD

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Adapters—	Material		Size				
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FORMY CON RECORD—Continued

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 - JENKINS B FEDERAL #10 (API# 30-015-30668)

<b>,</b>	PURPOSE: X Secondary Recovery Application qualifies for administrative approval?	Pressure Maintenance Yes	Disposal <u>X</u> No	Storage
II.	OPERATOR: COG OPERATING LLC			
	ADDRESS: 550 WEST TEXAS AVE., SUITE 1300, MIDLAND, TX 79701			
	CONTACT PARTY: GAYLE BURLESON	PHONE: (432) 685-434	<u>.O</u> .	
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?  If yes, give the Division order number authorizing t	Yes X No		· · · · · · · · · · · · · · · · · · ·
V.	Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circ 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 rec Such data shall include a description of each well's t schematic of any plugged well illustrating all plugge	type, construction, date drilled		
VII.	Attach data on the proposed operation, including:			
	<ol> <li>Proposed average and maximum daily rate and value.</li> <li>Whether the system is open or closed;</li> <li>Proposed average and maximum injection press.</li> <li>Sources and an appropriate analysis of injection produced water; and,</li> <li>If injection is for disposal purposes into a zone rechemical analysis of the disposal zone formation wells, etc.).</li> </ol>	ure; fluid and compatibility with the	ne receiving formation if	proposed well, attach
*VIII.	Attach appropriate geologic data on the injection zo depth. Give the geologic name, and depth to bottom total dissolved solids concentrations of 10,000 mg/known to be immediately underlying the injection is	n of all underground sources of l or less) overlying the propose	drinking water (aquifers	containing waters wi
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			
*XI.	Attach a chemical analysis of fresh water from two cinjection or disposal well showing location of wells		vailable and producing) w	rithin one mile of any
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" sec	tion on the reverse side of this	form.	
	Certification: I hereby certify that the information sand belief.	ubmitted with this application	is true and correct to the	best of my knowledge
,	NAME: BRIAN WOOD		TITLE: <u>CO</u>	<u>NSULTANT</u>
	/ X_/			



- 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.

OPERATOR: COG OPERATING LLC

WELL NAME & NUMBER: JENKINS B FEDERAL #10

WELL LOCATION:

FOOTAGE LOCATION 850'FNL & 2310'FWL

 $\frac{C}{UNIT LETTER}$ 

TOWNSHIP 17 S

 $\frac{20}{\text{SECTION}}$ 

 $\frac{30 \text{ E}}{\text{RANGE}}$ 

WELLBORE SCHEMATIC

Jenkins B Federal #10 850'FNL & 2310'FNL 20-17S-30E ELKY: 3,649' TD: 4,744' PBTD: 4,703' DV TOOL: 3,838' (Drilled Out)

WELL CONSTRUCTION DATA Surface Casing Casing Size: 13-3/8"

or

£3

Method Determined: Circulated

Cemented with: 400 sx

Hole Size: 17-1/2"

Top of Cement: Surface

13-3/8" 54# @ 417', Circ w/ 400 sks

Casing Size: 8-5/8"

Intermediate Casing

Cemented with: 475 sx

Hole Size: 12-1/4"

or

tt3

Top of Cement: Surface

8-5/8" 24# @ 1,037', Circ w/ 475 sks

84 to pits

Casing Size: 5-1/2"

Method Determined: Circulated

Production Casing

Hole Size: 7-7/8"

Top Perf @ 4,418

DV Tool @ 3,838

 $\mathfrak{t}\mathfrak{t}_{3}$ 

Method Determined: Circulated

Cemented with: 1000 sx

or

Top of Cement: Surface

Total Depth: 47142

Bottom Perf @ 4,666.5

Injection Interval

4666.5 feet 4418 feet to

(Perforated)

5-1/2" 15.5#,J-55@ 4,714',1st stg 200 sks 2nd stage 750 sks. Circ 60sks

2-7/8" J-55 @ 4,685

## INJECTION WELL DATA SHEET

Lining Material: PLASTIC Tubing Size: 2-7/8"

Type of Packer: MODEL R INJECTION PACKER

Packer Setting Depth: APPROXIMATELY 100' ABOVE HIGHEST PERFORATION

Other Type of Tubing/Casing Seal (if applicable):

### Additional Data

If no, for what purpose was the well originally drilled? OIL PRODUCTION Yes Is this a new well drilled for injection?

No No

- Name of the Injection Formation: PADDOCK MEMBER OF THE YESO FORMATION
- Name of Field or Pool (if applicable): LOCO HILLS; PADDOCK (#96718) 3
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. NO
- OVER: GRAYBURG JACKSON; SR-Q-SA-G-SA (BOTTOM @ 4,044' IN JENKINS B FEDERAL #17) Give the name and depths of any oil or gas zones underlying or overlying the proposed UNDER: BLINEBRY (TOP @ 4,780' IN JENKINS B FEDERAL #18) injection zone in this area:

Well: Jenkins B Federal # 10

850'FNL & 2310'FWL Sec 20, T17S, R30E

**ELEV: 3,649'** 

TD: 4,744'

**DF:** ?

PBTD: 4,703'

**KB:** ?

DV TOOL: 3,838' (Drilled Out) Pumping Unit: Lufkin 228

Casing

	SIZE,	WEIGHT,				
TYPE	in	lbs/ft	GRADE	TOP	BOTTOM	CEMENT
SURFACE	13-3/8	54#	K-55	SURFACE	417'	Circ w/ 400 sks, 85 sks to pit
INTERMEDIATE	8-5/8	24#	J-55	SURFACE	1,037	Circ w/ 475 sks, 84 sks to pit
						200 Circ. 85 sx . 2nd stage c/w
INTERMEDIATE	5-1/2	15.5#	J-55	SURFACE	4,714'	550 & 250 sx Circ. 60 sx.
PROD. LINER	2-7/8		J-55	SURFACE	4,685'	·

### **PERFS:**

4418.5,37,55.5,57.5,63,64.5,68,70.5,72.5,75,77.5,79.5,87.5,91.5,93,96.5,98.5,4500.5,02.5,04.5,08,12,13.5,15.5,17,19.5,20.5,22,23.5,26.5,29.5,32,33.5,36.5,39,40.5,42.5,44,45.5,47,50,51.5,54.5,57.5,61,63.5,75.5,77.5,81,82.5,85,87.5,90.5,94.5,96.5,98.5,4602,08.5,14.5,18.5,25,26,31,34.5,36.5,38.5,44.5,48,50.5,55.5,60,63.5,66.5

08/03/1999- Spud Date

**08/15/1999-** POH & RU Schlumberger. Finish running FMI. RD Schlumberger & RIH w/drill pipe POH laying down. RU RIH w/117 jts new 5 1/2" 15.5# J-55 LT&C landed @ 4714' PBTD @ 4703' Mk. Jt. @ 4370' & DV Tool @ 3838'. RU BJ & cmt. 1st stage w/200 sx 50-50-2 .5% FL-25 5# salt. Open hydraulic DV Tool & circ. 85 sx. Circ. 6 hrs. Cmt 2nd stage w/550 sx 35-65-6 1/4# CF 3# salt & 250 sx 50-50-2 .5% FL-25 5# salt. Circ. 60 sx. Plug down @ 5:30 AM 8/16/1999

**08/24/1999**- RU Schlumberger & log & perf. 4418.5-4666.5' 73 holes. RD Schlumberger & RIH w/5 1/2" PPI Tool leave above perfs overnight.

**08/25/1999-** RU BJ & acidize w/2500 gals 15% NEFE acid & 219 balls. Breakdown 1470# @ 2.9 bpm. Avg. rate 5.7 bpm Avg. Psi 2100#. ISIP 560# 5 min. 202# 10 min. 70# 15 min. 0 Balled off 5000# w/130 balls.RU & pull 6 swab runs. 6th run tagged @ 2100' pulled from 3800' 1700' fluid w/13% oil cut. Ready for hot acid job.

**08/26/1999-** RU BJ & pump hot acid job 32,000 gals heated 20% HCL & 54,000 gals heated 40# gel in 25 & 41 bbl stages. Dropped 75 balls & 1000# block in 10 stages. Avg. Rate 9 bpm Avg. Psi 1800#. ISIP 850# 5 min. 783# 10 min. 738# 15 min. 693#. Pump 5000 gals 15% HCL cold acid @ 2 bpm @ 610# Flush w/90 bbls FW @ 2 bpm @ 460#. ISIP 394# 5 min. 306# 10 min. 264# 15 min. 220#. Well flowed back approx. 15 min. Release RTTS & RIH clean out to PBTD. POH w/RTTS. 08/27/1999- RIH w/prod. tbg.

land SN @ 4685' w/158 jts. TA @ 4208' w/142 jts. RIH w/2 1/2x2x20' RHBC HVR PAP BNC pump. 58-1" & 126-7/8" 2'x7/8" & 10'x1" ponies.

12/29/1999- MIRU unit 85, POH lay down all 1" rods, stand up 60-7/8" rods, laydown rest of 7/8" rods, RIH with 2 1/2 x 2 x 16' HVR PAP pump, 2ft pony, 127-3/4"New type 97 WCN rods, 59-7/8" rod, polish rod and liner, hang well back on, replace puming unit Lufkin 228, put back on production. clean up rig down.

02/2006- Production totals of the Paddock 79,006 bbls oil & 208,459 MCF gas

Form 3160-4 (October 1990)

Form 3160-4 (October 1990)	•			'IMI	TEC	) ST	ATES		SUB	MITI	N cribl	ICATE*	.1	FOR	APPROVED (\ 5)
• .	DE	PAF		MEI	NT (	OF T	HE IN	17	RIO		到 提出 2	ruction o	13ION Ex		ecember 31,199
•		Bl	JRE	AU O	F LA	ND MA	NAGEM	ENT				210-28	34	LC-	054988B
WELL C	OMPLE	10IT	۱ (	OR R	ECC	MPL	ETION	IRI	EPOR	TA	ND L	OG*	6. IF INDIA	N, ALL	OTTEE OR TRIBE NAME
1a. TYPE OF WEI		OIL	L	Ø	GAS WELL		DRY 🗌	Ot	h+r				7. UNIT AC	REEM	ENT NAME
NEW WELL	WORK DOVER	] OEE	EPEN		PLUG   BACK		RESVR.	Ot	her 39	202	12223	<del>.</del>	8. FARM	OR LE	ASE NAME, WELL NO
2. NAME OF OPERA	•								1			135	<u> </u>		3 Federal #10
Mack Energy								_/;	9	£	<del></del>	<u>  15</u>	9. API WEI		15-30668 Si
3. ADDRESS AND P.O. Box 960,				11-09	60		ļ	505	748-2	2 288	~ ( )n	72	IO. FIELD		OL, OR WILDCAT
4. LOCATION OF							nce with a	n S	ate requi		(E)	- E			lls Paddock
Atsurface			•				850 FN	Γ þ.	10 FW	L"/	5/1	ું હેં/	11. SEC., 7		, OR BLOCK AND SURVEY
At top prod. into	erval report	ed belo	w				850 FN		\ \ \ \		~	S/ -	UK AF	CEA	
At total depth				. ,			850 FN	L 23	10 FEV	<b>[9</b> 9	4527		Se	c 20	T17S R30E
						14. PERM	IIT NO.		1	DATE	ISSUED	-	12. COUNT PARISI Ed	Y OR dy	13. STATE NM
15. DATE SPUDDED 8/3/1999	16. DATE T.0	. REACH 3/1999		17	r. DATE C	8/27/	leady to prod 1999	.) .	18. E	ELEVAT		RKB, RT, C		19. (	3649 GR
20. TOTAL DEPTH, MD 4744		21. PLU	G, B/	ACK T.D.,	-	VD .	22. IF MUL HOW M		COMPL.,			ERVALS LLED BY	ROTARY T		CABLE TOOLS
24. PRODUCING INT		OF THIS	COL		703 on - to	Р, ВОТТ	OM, NAME	(MD /	AND TVD)	,		<del></del>	Tes		. WAS DIRECTIONAL SURVEY MADE
					4418	.5-466	6.5, Pad	ddo	ck				• .		Yes
28. TYPE ELECTRIC	AND OTHER	LOGS F	RUN								<del></del>	<del></del>		27.	WAS WELL CORED
28.	Gamma	Ray,	Ne	utron			ateralo CORD (					ay		L	No ,
CASING SIZE/GRADE	WEIGH	IT, LBJF1	r	T D	EPTH SE			OLE S		75 551		EMENT, CE	MENTING RECO	ξD	AMOUNT PULLED
13 3/8		54			41	7		17 1	/2		٠.	400	sx		None
8 5/8		24			103			12 1				475			None
5 1/2	_	15.5		+	471	4	+	7 7/	8	-		1000	sx		None
29.	1		LINI	ER REC	CORD				<del></del>	٠.,	30.		TUBING REC	ORD	<u> </u>
SIZE	TOP(ME	))	ŧ	NOT TOE	(ND)	SACKS	CEMENT	S	CREEN (MC	)) ·	SIZE		DEPTH SET	(MD)	PACKER SET (MD)
			1	ACC	EPTE		120	20	<u> </u>		27	/8	4685		
1. PERFORATION F	RECORD (Int	erval, s	iza	and mun	nber)	- Onesca-	** *****	32	, ;		ים באט	T EBAC	TURE CEME	NT SO	UEEZE, ETC
			1			23	ଘଟର	<del> </del>	PTH INT						MATERIAL USED
						- 0 /	acs	,	4418.5	5-466	6.5				% NE acid
							u A		4418.	5-466	66.5		32,000 ga	ls 20	% NE acid
	4418.	5-4666	6.5	, 41,	73		<del></del>	+	<b> </b>		·	<del> </del> -			
33.				<del></del>			PRO	DUC	TION			<del></del>			
DATE FIRST PRODUC 9/03/19		PROD	UCT	ION MET	HOD (Flo	2 1/2 x	lift, pumping	HB	C HVR	PAP			WELL Shut-		(Producing or Producing
9/14/1999	HOURS TE			CHOKE	SIZE		PERIOD	OIL-	BBL. 143		GAS-M	CF. 35	WATER-BE		GAS-OIL RATIO 1643
FLOW. TUBING PRESS	CASING P	RESSUR	E		ULATED OUR RATI	E OIL	-BBL. 143		GAS-M	CF. 235		WATER	- ввс. 625	OIL GR	AVITY - API (CORR.)
34. DISPOSITION OF	F GAS (Sold,	used fo	r fue	al, vente	d, etc.)		(	Sold							·
6. LIST OF ATTACH	MENTS														
36. I hereby certify		egoing	any	d attac	hed inf			lete			determi n Anal				9/21/1999
SIGNED	Ussa	<u> </u>		ب حرير		<u>.                                    </u>	TLE						DA		

\*(See Instructions and spaces for Additional Data on Reverse Side)

	÷					i ecoveries).	-		
FORMATION	TOP	BOTTOM		DESCRIPTION	DESCRIPTION, CONTENTS, ETC.	rc.		T	TOP
Town of the property of	0007			· .	•		NAME	MEAS.DEPTH	TRUE VERT,DEPTH
LOCO FIIIS FAGGOCK	4798	4033					Queen	2042	·
							San Andres	2766	
							Glorietta	4193	
							-		
: b	S. S.					·			
			1 <u>2</u>				-		• •
								`	

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 – JENKINS B FEDERAL #12 (API# 30-015-31559)

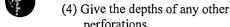
	PURPOSE: X Secondary Recovery	Pressure Maint	enance	Disposal	Storage
	Application qualifies for administrative appro-	val?Yes		X No	
II.	OPERATOR: COG OPERATING LLC				
	ADDRESS: 550 WEST TEXAS AVE., SUIT	E 1300, MIDLAND, TX	<u> 79701</u>		
	CONTACT PARTY: GAYLE BURLESON	PHONE: <u>(4</u>	32) 685-434	<u>0</u>	
III.	WELL DATA: Complete the data required on Additional sheets may be attack		form for each	well proposed for injection	ction.
IV.	Is this an expansion of an existing project?  If yes, give the Division order number authorize	Yes zing the project:	<u>X</u> No		
V.	Attach a map that identifies all wells and lease drawn around each proposed injection well. T				-half mile radius circle
VI.	Attach a tabulation of data on all wells of publ Such data shall include a description of each w schematic of any plugged well illustrating all p	vell's type, construction,			
VII.	Attach data on the proposed operation, includi	ng:	•		
	<ol> <li>Proposed average and maximum daily rate</li> <li>Whether the system is open or closed;</li> <li>Proposed average and maximum injection</li> <li>Sources and an appropriate analysis of injeproduced water; and,</li> <li>If injection is for disposal purposes into a chemical analysis of the disposal zone for wells, etc.).</li> </ol>	pressure; ection fluid and compatil zone not productive of o	bility with the	within one mile of the	proposed well, attach a
*VIII.	Attach appropriate geologic data on the inject depth. Give the geologic name, and depth to b total dissolved solids concentrations of 10,000 known to be immediately underlying the injection.	ottom of all undergroun mg/l or less) overlying	d sources of	drinking water (aquifer	s containing waters wit
IX.	Describe the proposed stimulation program, if	any.	· .		
*X.	Attach appropriate logging and test data on the	e well. (If well logs have	e been filed v	vith the Division, they r	need not be resubmitted
*XI.	Attach a chemical analysis of fresh water from injection or disposal well showing location of v			ailable and producing) v	vithin one mile of any
XII.	Applicants for disposal wells must make an af data and find no evidence of open faults or an sources of drinking water.				
XIII.	Applicants must complete the "Proof of Notice	e" section on the reverse	side of this f	orm.	
	Certification: I hereby certify that the informat and belief.	cion submitted with this	application is	s true and correct to the	best of my knowledge
	NAME: BRIAN WOOD	· / <sub>2</sub> ()		TITLE: CO	<u>NSULTANT</u>
_	SIGNATURE:	1097 X		DATE: <u>FE</u>	



- 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

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.

OPERATOR: COG OPERATING LLC

WELL NAME & NUMBER: JENKINS B FEDERAL #12

WELL LOCATION:

2310'FNL & 2310'FWL FOOTAGE LOCATION

 $rac{ar{E}}{ ext{UNIT LETTER}}$ 

17.S TOWNSHIP  $\frac{20}{\text{SECTION}}$ 

30 E RANGE

WELLBORE SCHEMATIC

2310'FNL & 2310'FWL Sec 20, 7175, R30E ELEV: 3,640' TD: 4,900' PBTD: 4,851' DV TOOL: 3,970'

Jenkins B Federal #12

13-3/8" 48# @ 427", Circ w/ 450 sks

8-5/8" 24# @ 1,098', Circ w/ 600 sks

23 to pits

Top of Cement: Surface

Cemented with: 600 sx

Hole Size: 12-1/4"

DV Tool @ 3,970

Top Perf @ 4,321 Sottom Perf @ 4,748

2-7/8", J-55 @ 4,781

5-1/2" 11.6#, J-55@ 4,866',1st stg 200 sks Circ 125 sks. 2nd stage 850 sks. Circ 154sks

WELL CONSTRUCTION DATA

Surface Casing

Casing Size: 13-3/8"

or

 $\mathfrak{t}^3$ 

Method Determined: Circulated

Top of Cement: Surface

Cemented with: 450 sx

Hole Size: 17-1/2"

Intermediate Casing

Casing Size: 8-5/8"

 $\mathbb{H}^3$ 

Method Determined: Circulated

Production Casing

Hole Size: 7-7/8"

Cemented with: 1050 sx

Top of Cement: Surface

Total Depth: 4866'

Casing Size: 5-1/2"

or

Method Determined: Circulated

ft3

Injection Interval

4321 feet to 4748 feet

(Perforated)

## INJECTION WELL DATA SHEET

Lining Material: PLASTIC Tubing Size: 2-7/8"

Type of Packer: MODEL R INJECTION PACKER

Packer Setting Depth: APPROXIMATELY 100' ABOVE HIGHEST PERFORATION

Other Type of Tubing/Casing Seal (if applicable):

### Additional Data

If no, for what purpose was the well originally drilled? OIL PRODUCTION Yes Is this a new well drilled for injection?

» N

- Name of the Injection Formation: PADDOCK MEMBER OF THE YESO FORMATION
- Name of Field or Pool (if applicable): LOCO HILLS; PADDOCK (#96718)
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. NO
- OVER: GRAYBURG JACKSON; SR-Q-SA-G-SA (BOTTOM @ 4,044' IN JENKINS B FEDERAL #17) Give the name and depths of any oil or gas zones underlying or overlying the proposed JNDER: BLINEBRY (TOP @ 4,780' IN JENKINS B FEDERAL #18) njection zone in this area:

Well: Jenkins B Federal # 12

2310'FNL & 2310'FWL Sec 20, T17S, R30E

**ELEV: 3,640'** 

TD: 4,900'

**DF:** ?

PBTD: 4,851'

**KB:** ?

DV TOOL: 3,970' Pumping Unit: ?

Casing

ТҮРЕ	SIZE, in	WEIGHT, lbs/ft	GRADE	ТОР	воттом	CEMENT
SURFACE	13-3/8	48#	J-55	SURFACE	427'	Circ w/ 450 sks, 65 sks to pit
INTERMEDIATE	8-5/8	24#	J-55	SURFACE	1,098'	Circ w/ 600 sks, circ 23
DIMEDIATE	5.1/0	15.54	1.55	CVDD A CD	4.0663	200 sks Circ. 125 sx . 2nd stage c/w 650 & 200 sx Circ.
INTERMEDIATE	5-1/2	15.5#	J-55	SURFACE	4,866'	154 sx.
PROD LINER	2-7/8		J-55	SURFACE	4,781'	

**PERFS:**4321,22.5,24,29,37.5,43,46,48,50,54,56,66.5,81,85.5,91,92.5,97,98.5,4401.5,04, 06,08,10,13,17.5,32.5,36,45,50,57,63.5,4518,20.5,24,27,29,30.5,32,38,41,45,49.5,52.5,55,57,59.5,63,64.5,66,74,76,78.5,89.5,91,92.5,94,96.5,98,99.5,4603,06.5,08,10,12,14,15.5,19,21,23,25.5,27.5,29,32,33.5,49,51,53,60,69,71,74,76,80,84.5,86,89,93.5,4713,17,22,26,34,35.5,43.5,45,48

### 2/21/2001- Spud Date

03/09/2001 - RU Schlumberger & perf. 4321-4748' 96 holes. RIH w/5 1/2" PPI Tool.

**03/12/2001-** RU BJ & acidize w/2500 gals 15% NEFE acid & 288 balls. Breakdown @ 1616# @ 2.3 bpm. Avg. Rate 6.5 Avg. Psi 2226 ISIP 1051# 5 min. 691# 10 min. 633# 15 min. 545#. Balled off w/245 balls. Rev. out &PPI perfs. RU pull 8 swab runs final fluid level 1700' w/10% oil cut. Trip Pkr.

**03/13/2001**- RU BJ & pump hot acid job 32,000 gals heated 20% HCL & 54,000 gals heated 40# gel in 25 & 41 bbl stages. Dropped 1000# block & 100 balls in 10 stages. Avg. Rate 6 Avg. Psi 1609# ISIP 1118# 5 min. 943# 10 min. 895# 15 min. 875#. Pump 5000 gals cold 15% HCL @ 2 bpm @ 1000# Flush w/90 bbls FW @ 2 bpm @ 846# ISIP 924# 5 min. 826# 10 min. 817# 15 min. 797#.

**03/14/2001-** RIH clean out to PBTD @ 4814'. POH laydown pkr. RIH w/152 jts 2 7/8" J-55 Prod. tbg. landed @ 4781' TA @ 4155' w/132 jts. RIH w/2 1/2x2x16' RHBC HVR PAP BNC pump. 189 type 97 wcn new 3/4" rods. 2'-2'-6'-8'x3/4" ponies.

02/2006- Production totals of the Paddock 40,914 bbls oil & 128,810 MCF gas

Form 3160-4 (October 1990)

UPTED STATES
SUBNIT NO DIPLICATE

N.M. OIL DIPLICATE
DIVISION NO. 1004-0137

DEPARTM INT OF THE INTERIOR S. 181-511901 Lease DESIGNATION AND SERIAL NO.

BUREAU OF LAND MANAGEMENT

LC-054988B

WELL CO	OMPLETIO	N OR	RECO	OMPLI	ETION	REF	PORTA	NDL	OG*		Chilling.	DITEE OR TRIBE NAME
1a. TYPE OF WEL	L: Q	ELL 🛛	GAS WELL	П	DRY 🗌	Other			· · · · · · · · · · · · · · · · · · ·	7. UNIT AG	REEME	NT NAME
b. TYPE OF COM			NELL.		URT LL	Other		/33	12.15	• 1		•
NEW WELL		EPEN	PLUG BACK		IFF.	Other		91011	213147	R FARM C	R LE	ASE NAME, WELL NO
2. NAME OF OPERAT	OVER L.J		BACK	L R	ESVR.	Otale.		<u> </u>				Federal #12
Mack Energy (	100			•			50	4	•	5. API WELL		7 Cuciui ir iz
3. ADDRESS AND							\(\frac{\text{\tinit}\\ \text{\ti}}}\\ \tittt{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi}\text{\text{\text{\text{\texi}\text{\texi}\tilint{\text{\text{\text{\text{\text{\text{\tin}\}\tittt{\text{\text{\texi}\tex			1 75	200	5-31559
P.O. Box 960,			0960			505\ 7			IVED	IC FIELD A		DL, OR WILDCAT
4. LOCATION OF V				accordan			requiremen	123 4 F. M	ARTESIA	100		ls Paddock
At surface							10 FWL	OCD.	100	11 SEC T		OR BLOCK AND SURVEY
At top.prod. inte	rval reported bel	ow.					160	\$05728		OR ARI		ON DECONAND SORVET
	•			* .			100	ر در حری خ	767. S	t		
At total depth			-			•		920	0011			T17S-R30E
				14. PERM	IT NO.			EISSUED	,	12. COUNTY PARISH Ed	OR Iv	13. STATE NM
15. DATE SPUDDED	16. DATE T.D. REAC	JED	17 DATE	COMPL (Re	natu ta ama		40 ELEVA	TIONS (DE	RKB, RT, G	<del></del>	<del></del>	LEV. CASING HEAD
2/21/01	3/1/01	IED	III. DATE	3/14		,	16. ECEVA		52 RKB	, E10.j		3640
20. TOTAL DEPTH, MD 8	TVD 21. PL	JG, BACK	T.D., MD & 7 4851	TVD	22, IF MUL HOW M		MPL.		ERVALS	ROTARY TO	OLS	CABLE TOOLS
24. PRODUCING INTE	RVAL (S), OF THIS	COMPL	ETION - TO	Р, ВОТТО	M, NAME	(MD AND	TVD)*	<del></del>			25.	WAS DIRECTIONAL SURVEY MADE
	·		432	21-4748	B Padd	ock						Yes
26. TYPE ELECTRIC	ND OTHER LOGS	RUN		•••							27. W	VAS WELL CORED
	Gamma Ray,	Neutr							tay			No ·
28.							l strings set					· · · · · · · · · · · · · · · · · · ·
CASING SIZE/GRADE	WEIGHT, LBJF	T	DEPTH S			LE SIZE	-	TOP OF C		ENTING RECOR		AMOUNT PULLED
13 3/8 J-55	48		42			17 1/2		· · ·	450 5			None
8 5/8 J-55	24		109			2 1/4			600 s			None
5 1/2 J-55	17		486	56		7 7/8			1050	SX .		None
29.		LINER	RECORD					30.	···	UBING REC	ORD	
SIZE	TOP(MD)		TOM (MD)	SACKS	CHENT	SCRE	EN (MD)	SIZI		DEPTH SET (		PACKER SET (MD)
		1	· Cia (iii.b)	- SHORE			.c. (m.c)	2.7		4781		
	<del></del>	<del> </del>		<del> </del>					<del>···</del>			
31. PERFORATION R	ECORD (Interval,	ize and	number)	<del></del>	1	32.	AC	ID. SHO	T. FRACT	URE, CEMEN	IT SOL	UEEZE. ETC
						DEP	TH INTERVA					ATERIAL USED
	•						4321-47	·	<del> </del>	2500 gals	15%	NE Acid
							4321-47		<del> </del>			6 NE Acid
							4321-47	48		54000 g		
	4321-474	8, .41,	, 96				4321-47	48		5000 cold	15%	HCL Acid
33.					PRO	DUCTIO	N					
DATE FIRST PRODUCT 3/18/0*	(, ,,,,	DUCTION	метнор ( <i>Fi</i> 2 1	lowing, gas li	it, pumping k 16' R	size and I	ype of pump)	BNC		WELL S shut-in		Producing or Producing
DATE OF TEST	HOURS TESTED	СН	OKE SIZE	PROD'	N FOR	OIL-BBI		GAS-M	CF.	WATER-BBI	T	GAS-OIL RATIO
3/26/01	24	- 7		TEST F	PERIOD	1	17	I A	CEPT	DEARS	FCC	)BD 1916
FLOW. TUBING PRESS.	CASING PRESSUR		ALCULATED 4-HOUR RAT		BBL. 117	0	224	1	-	55	OIL CR	AVITY API (CORR.)
34. DISPOSITION OF	GAS (Sold, used f	or fuel, v	ented, etc.)						AP			
·				· · ·		Sold			173			
35, LIST OF ATTACHE	MENTS								10.7			
36. I hereby certify	that the forescia	n and c	tached 1-4	lormatic -	le com-	lete end	correct co	data	RAN YANG	all svallable	ncord	
( '							roductio					3/27/01
SIGNED	usa 1	· (C	<u>-</u>	ти	LLE		. 544640	,	7~-	DAI	Ε	

\*(See Instructions and spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 1001, makes 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.

FORMATION	TOP	ВОТТОМ	DESCRIP	DESCRIPTION, CONTENTS, ETC.		TOP	d
1 TT W TALL	0101	1007			NAME	MEAS,DEPTH	TRUE VERT.DEPTH
Loco milis raddock	4518	4/31			Queen	2070	
	(;				San Andreas	2821	-
BLM ROSWELL, NM	 70				Glorietta	4254	
MAR 2.9 2001							
RECEIVED	R				: .		
	·						
							•
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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 – JENKINS B FEDERAL #13 (API# 30-015-31560)

	ATTECATION FOR AUTHORIZATION I	O HIJECT - JEHR	INS D FEDERAL #13	(A1 1# 30-0	13-313001
	PURPOSE: X Secondary Recovery Application qualifies for administrative approval?	_Pressure Maintenand	ceDispos <u>X</u> No	al	Storage
П.	OPERATOR: COG OPERATING LLC		4		
	ADDRESS: 550 WEST TEXAS AVE., SUITE 1300,	MIDLAND, TX 797	01		
	CONTACT PARTY: GAYLE BURLESON	PHONE: (432)	585- <u>4340</u>		
III.	WELL DATA: Complete the data required on the rev Additional sheets may be attached if i		for each well proposed	for injection	n.
IV.	Is this an expansion of an existing project?  If yes, give the Division order number authorizing the	Yes X			·
V.	Attach a map that identifies all wells and leases within drawn around each proposed injection well. This circ			rith a one-ha	lf mile radius circle
VI.	Attach a tabulation of data on all wells of public records Such data shall include a description of each well's ty schematic of any plugged well illustrating all plugging	pe, construction, date			
VII.	Attach data on the proposed operation, including:				
	<ol> <li>Proposed average and maximum daily rate and vo</li> <li>Whether the system is open or closed;</li> <li>Proposed average and maximum injection pressur</li> <li>Sources and an appropriate analysis of injection fl produced water; and,</li> <li>If injection is for disposal purposes into a zone no chemical analysis of the disposal zone formation wells, etc.).</li> </ol>	re; luid and compatibility it productive of oil or	with the receiving for	le of the pro	posed well, attach a
*VIII.	. Attach appropriate geologic data on the injection zon depth. Give the geologic name, and depth to bottom of total dissolved solids concentrations of 10,000 mg/l c known to be immediately underlying the injection into	of all underground sor or less) overlying the	urces of drinking water	(aquifers co	ntaining waters wit
IX.	Describe the proposed stimulation program, if any.		•		
*X.	Attach appropriate logging and test data on the well.	(If well logs have bee	n filed with the Division	on, they need	I not be resubmitted
*XI.	Attach a chemical analysis of fresh water from two or injection or disposal well showing location of wells an			ducing) with	in one mile of any
XII.	Applicants for disposal wells must make an affirmati data and find no evidence of open faults or any other sources of drinking water.				
XIII.	Applicants must complete the "Proof of Notice" section	on on the reverse side	of this form.		,
XIV.	Certification: I hereby certify that the information sub and belief.	omitted with this appl	ication is true and corre	ect to the bes	t of my knowledge
	NAME: BRIAN WOOD		TT	TLE: <u>CONS</u>	<u>ULTANT</u>
	SIGNATURE:	99	D/	ATE: <u>FEB. 5</u>	, 2007
*	E-MAIL ADDRESS: <u>brian@permitswest.com</u> If the information required under Sections VI, VIII, X Please show the date and circumstances of the earliers		en previously submitte	d, it need no	ot be resubmitted.



- 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.

## INJECTION WELL DATA SHEET

# OPERATOR: COG OPERATING LLC

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2310' FNL & 880' FWL	FOOTAGE LOCATION
WELL LOCATION:	

### WELLBORE SCHEMATIC Jenkins B Federal #13

UNIT LETTER

SECTION

TOWNSHIP 17 S

30 E RANGE

### WELL CONSTRUCTION DATA

Surface Casing

Casing Size: 13-3/8"

or

 $\mathfrak{t}\mathfrak{t}^3$ 

Method Determined: Circulated

Top of Cement: Surface

13-3/8" 48# @ 450°, Circ w/ 450 sks

68 to pits

Cemented with: 450 sx

Hole Size: 17-1/2"

Intermediate Casing

Casing Size: 8-5/8"

Hole Size: 12-1/4"

Cemented with: 600 sx

Top of Cement: Surface

8-5/8" 24# @ 1,090', Circ w/ 600 sks

47 to pits

Method Determined: Circulated

or

 $\mathbb{H}^3$ 

Production Casing

Casing Size: 5-1/2"

ō

ft3

Method Determined: Circulated

Top of Cement: Surface

Total Depth: 4874'

Cemented with: 960 sx

Top Perf @ 3,912, Bottom Perf @ 3,928

Top Perf @ 3,106, Bottom Perf @ 3,402

DV Tool @ 4,137

Hole Size: 7-7/8"

Injection Interval

4715 feet ಧ 4312 feet

5-1/2" 11.6#, J-55@ 4,874',1st stg 180 sks Circ 82 sks. 2nd stage 780 sks. Circ 96sks

2-7/8", 1-55 @ 4,741

Top Perf @ 4,312 Bottom Perf @ 4,715

(Perforated)

## INJECTION WELL DATA SHEET

Lining Material: PLASTIC Tubing Size: 2-7/8"

Type of Packer: MODEL R INJECTION PACKER

Packer Setting Depth: APPROXIMATELY 100' ABOVE HIGHEST PERFORATION

Other Type of Tubing/Casing Seal (if applicable):

### Additional Data

If no, for what purpose was the well originally drilled? OIL PRODUCTION Yes Is this a new well drilled for injection?

No X

- Name of the Injection Formation: PADDOCK MEMBER OF THE YESO FORMATION 7
- Name of Field or Pool (if applicable): LOCO HILLS; PADDOCK (#96718)
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. YES

DHC WITH SAN ANDRES (3106' - 3928'); WILL SQUEEZE

OVER: GRAYBURG JACKSON; SR-Q-SA-G-SA (BOTTOM @ 4,044' IN JENKINS B FEDERAL #17) Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Š.

UNDER: BLINEBRY (TOP @ 4,780' IN JENKINS B FEDERAL #18)

Well: Jenkins B Federal # 13

2310'FNL & 880'FWL Sec 20, T17S, R30E

**ELEV: 3,624'** 

TD: 4,880'

**DF:** ?

PBTD: 4,860'

**KB:** ?

**DV TOOL: 4,137 Pumping Unit: ?** 

Casing

ТҮРЕ	SIZE, in	WEIGHT, lbs/ft	GRADE	ТОР	воттом	CEMENT
SURFACE	.13-3/8	48#	K-55	SURFACE	465'	Circ w/ 450 sks, 68 sks to pit
INTERMEDIATE	8-5/8	24#	J-55	SURFACE	1,090'	Circ w/ 600 sks, 47 to pits
INTERMEDIATE	5-1/2	15.5#	J-55	SURFACE	4,874'	180 sks Circ. 82 sx . 2nd stage c/w 530 & 250 sx Circ. 96 sx.
PROD. LINER	2-7/8		J-55	SURFACE	4,741'	

### PERFS:

4312.5,15,16.5,18,23,24.5,33.5,57,60.5,63.5,75.5,4408.5,17,22.5,25.5,28.5,31.5,34,38,40. 5,82.5,84.5,89,95.5,4503.5,05.5,10.5,17,19.5,21.5,23.5,26.5,28.5,30.5,32.5,36.5,38.5,40.5,42.5,45 ,47,48.5,53,57,59,61.5,63.5,65.5,67.5,71.5,73.5,75.5,80.5,83.5,86,88,93,95.5,97.5,99.5,4602,05,0 8,12,14.5,16.5,18.5,21,27,29,31.5,33.5,36,39,46,48.5,50,52.5,54.5,60.5,65.5,67.5,69.5,71.5,73,77. 5,82,84,87.5,91.5,94,96,98,4703,06.5,10,15.5

3912'-3928' 2/SPF 33 holes

3402,07.5,11.5,17,25.5,31,33,38,45,48.5,57.5,60.5,68,97,3506,08,16,23,30,32.5,36,46.5,51.5,58,6 6,75,82,87,91,95.5 2/SPF 60 holes

3106.5,08,14,19.5,27,42,57,64,70.5,74,81,89,94,97.5,3210.5,14,16,21.5,25.5,28.5,35,39,46,48,51,58.5,64.5,71.5,73.5,75,78,85,96 2/SPF 66 holes

### 2/23/2001- Spud Date

04/17/2001- Drill out DV Tool & RIH tag PBTD @ 4860' circ. hole. POH RU Schlumberger & perf. 4312.5-4715.5 97 holes.

**04/18/2001-** RU BJ & acidize w/2500 gal 15% NEFE acid & 291 balls. Breakdown @ 1218# @ 2.1 bpm. Avg. Rate 6.5 Avg. Psi 1365#. ISIP 682# 5 min. 166# 10 min. 0. Didn't ball off. Rev. out & PPI perfs. RU & swab. pulled 8 swab runs FFL @ 1800' w/10% oil cut. Trip Pkr.

**04/19/2001**- RU BJ & pump hot acid job. 32,000 gals 20% heated HCL & 54,000 gals heated 40# gel in 25 & 41 bbl stages. Dropped 100 balls & 1000# block in 10 stages. Avg. Rate 6 bpm Avg. Psi 1249#. ISIP 768# 5 min. 710# 10 min. 690# 15 min. 651# Pump 5000 gals cold 15% HCL @ 2 bpm @ 700#. Flush w/90 bbls FW 2 bpm @ 544# ISIP 515# 5 min. 476# 10 min. 467# 15 min. 418#. Well dead in 1 hr. POH w/Pkr.

**04/20/2001-** RIH below perfs & POH laydown Pkr. RIH w/151 jts 2 7/8" J-55 Prod. Tbg. SN @ 4741' TA @ 4114' w/131 jts. RIH w/2 1/2x2x16' RHBC HVR PAP BNC pump. 188 new wcn type 97 3/4" rods. & 16' ponies.

**09/21/2005-** POH with tbg. and rig up Schlumberger. Ran Gamma Ray Collar Log and perforated from 3912' to 3928' 2/SPF 33 holes. Rig wireline down and pick up workstring and RIH with RBP and RTTS. Acidized with 1500 gals. 15% NEFE and 66 ball sealers. Broke @ 3000 psi, balled off to 5000 psi, avg. psi-3000, avg. rate-5.7 BPM. ISIP-2200, 5 min.-2033, 10 min.-1968, 15 min.-1909. Bled off and made 5 swab runs. IFL-surf, FFL-3000', last run had 5% oil and good gas.

**09/24/2005**- Sand Frac well 21,500# 16/30 Brady brown and 6000# Super LC (total 27,500#) with 35,994gals 40# Linerar Gel, Avg Rate 78 BPM, Avg Press 4138PSI, ISIP 2470PSI, 5m-2200PSI, 10m-1095PSI, 15m-1980PSI. shut well in rig BJ down.

**09/26/2005**- No psi an well, ND frac valve and NU wellhead and BOP. RIH with overshot and wash 70' sand, unset RBP and POH. Rig up Schlumberger and perforate 3402' to 3595.5' 2/SPF 60 holes. Rig wireline down and RIH with RBP and PPI tool. Did PPI job and ball job with 3000 gals. 15% NEFE and 180 ball sealers. Balled off to 4500 PSI with 132 balls. Avg. psi-2100, avg. rate-6.4 BPM. ISIP-1450, 5 min.-1055, 10 min.-954, 15 min.-912. Bled off and made 5 swab runs. Rec. 500' on last run with 1-2% oil. SDFD

**09/27/2005**- Made 1 swab run, rec. 1600' fluid, 200' free oil on top and about 10% oil on rest of run. Unset Pkr. and POH. ND wellhead and BOP and NU frac valve. Frac well with 2 tanks 30# gel and 8,000 lbs. Lite Prop 125 14/30 and 3 tanks40# gel and 78,820 lbs. white 16/30 and 16,000 lbs. Super LC 16/30 @ 81 BPM. Min. psi-2285, avg. psi-2329, max psi-2419. ISIP-1609, 5 min.-1432, 10 min.-1355, 15 min.-1300.

**09/28/2005**- Well was on vacuum, ND frac valve and NU wellhead and BOP. RIH with overshot and wash 60' sand. Unset RBP and POH. Rig up Schlumberger and perforate from 3106.5 to 3296' 2/SPF 66 holes. Rig wireline down and RIH with RBP and PPI tool. Did PPI job and ball job with 4000 gals. 15% NEFE and 200 ball sealers. Did not ball out, min. psi-1850, avg. psi-2000, max psi-3400. ISIP-2042, 5 min.-1302, 10 min.-563, 15 min.-168. Bled off and made 2 swab runs and well flowed acid with 2% oil for 10 mins.

**09/30/2005-** HYBRID FRAC 5-TANK. Frac well with 2 tanks 30# gel and 8,004 lbs. Lite Prop 125 14/30 and 3 tanks40# gel and 78,050 lbs. white 16/30 and 15,680 lbs. SB exel 16/30 @ 80 BPM. Min. psi-2713, avg. psi-2800, max psi-2841. ISIP-1948, 5 min.-1674, 10 min.-1573, 15 min.-1498.

10/03/05 - ND frac valve and NU wellhead and BOP. RIH w/ notched overshot and 2 7/8" tbg. Tag sand at 3349' w/ 108jts and wash 30' of sand. Unset RBP and POH. Lay down work string. RIH with 2 7/8" J-55 set SN @ 4741' w/ 151jts TAC @ 2914' w/ 93jts (TAC WOULD NOT SET) RIH with pump 2 1/2" x 2" x 20' RHTC Trash pump

ON/OFF with 188-3/4" rods and 2-2'  $\times$  3/4" and 8'  $\times$  3/4" ponies. Clean up, leave well pumping to battery.

10/05- Production of the Queen/San Andres begins

02/2006- Production totals of the Paddock 59,706 bbls oil & 181,962 MCF gas

02/2006- Production totals of the Queen/San Andres 2,708 bbls oil & 8,865 MCF gas

Form 3160-4

### NM Fill Com is

(October 1990)			UN	NITED	STA	TES	) 1 34	SUBMIT	IN DUPL	ICATE	Expli	FOR A IMB NO res: De	PPROVED ). 1004-0137 cember 31,1991
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WELL CO	OMPLE	TION	OR	RECC	MPLI	ETION	1 REF	PORT	AND L	OG*	6. IF INDIAN	, ALLC	TTEE OR TRIBE NAME
1a. TYPE OF WEL	L:	OIL WELL	$\boxtimes$	GAS WELL	<u> </u>	DRY 🗌	Other				7. UNIT AGR	EEME	NT NAME
b. TYPE OF COM		:		•			Other						
METT	WORK OVER	DEEPE	<u>" 🔲 </u>	PLUG BACK		ESVR.	Other	<u>D</u>	HC-351	9	_}		SE NAME, WELL NO
2. NAME OF OPERAT											Jenki 3. API WELL		Federal #13
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P.O. Box 960,			211-0	960			(505) 7	48-1288	<b>;</b>				DL, OR WILDCAT
4. LOCATION OF V						ce with a	ny State	requireme	ents)*		⊣ -		kson SR Q G SA
Atsurface			•		2:	310 FN	L & 88	30 FWL	RECI	EIVED	11. SEC., T.,	R., M., 0	OR BLOCK AND SURVEY
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At total depth					•			$\sim$		7 2005	Sec	20-1	17S-R30E
		•			14. PERM	IT NO	<u>.</u>		TE ISSUED	HIESH	**		13. STATE
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15. DATE SPUDDED	16. DATE T.	D. REACHED		17. DATE C	OMPL. (Re	eady to prod	·-)	18. ELEV	ATIONS (DF	, RKB, RT, GF	, ETC.)*	19. EL	EV. CASING HEAD
2/23/01	3	/5/01			10/3/2	2005		<u></u>	. 36	37 RKB		<u> </u>	3624
20. TOTAL DEPTH, MD 8 4880	TVD	21. PLUG,		г.в., мо & т 4860	/D .	22: IF MUL HOW M		MPL.,		ERVALS	rotary too	DLS	CABLE TOOLS
24. PRODUCING INTE	RVAL (S),	OF THIS CO	OMPLE	TION - TO	, вотто	M, NAME	(MD AND	י(מעד כ		<del></del>		25.	WAS DIRECTIONAL SURVEY MADE
				3106.	5-3928	, San A	Andres	5	•				Yes
26. TYPE ELECTRIC	AND OTHER Gamma	Ray, N	น eutro	on, Den	sity, La	ateralo	g, Spe	ectral Ga	ımma F	Ray		27. W	AS WELL CORED No
28.						CORD (	Report a	ll strings se	t in well)				
CASING SIZE/GRADE	WEIGH	IT, LBJFT		DEPTH SE			OLE SIZE		TOP OF C		ENTING RECORD		AMOUNT PULLED
13 3/8 K-55 8 5/8 J-55		48 .	-	46			17 1/2		··	450 s			None
5 1/2 J-55	<del>-  </del>	17		109 487			7 7/8		<del></del>	600 s 960 s			None None
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ALEXIS C. S	SWÖBOD	A ∴ FR∵						106.5-3		Amo	See 3160-5 for detail		
PETROLEGIM	LIVOITVE	1	ر.			1.	<b>-</b>	7100.3-3	320	<del>                                     </del>			
	3106.	5-3928',	.45,	159									
3.		1,				PRO	DUCTIO	N					
PATE FIRST PRODUCT 10/8/200		PRODUC	7ION M	ETHOD (Flo	ving, gas lit <b>2</b>	1. pumping -	size and t	ype of pump)			WELL STA		Producing or Producing
PATE OF TEST	HOURS TE	STED .	сно	KE SIZE	PRODI	V FOR	OIL-BBI		GAS-M	CF.	WATER-BBL.		GAS- OIL RATIO
10/18/2005	2	4		•	TEST P		;	35	1	36	241		3886
FLOW, TUBING PRESS.	CASING P	RESSURE		LCULATED HOUR RATE	OIL-E	35	G	3AS-MCF.	j.	WATER - I	3BL. 0	IL GRA	VITY - API (CORR.)
4. DISPOSITION OF	GAS (Sold.	used for fu	rel, ver	nted, etc.)						<u> </u>			

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

36. LIST OF ATTACHMENTS

**Production Clerk** 

11/28/2005

\*(See Instructions and spaces for Additional Data on Reverse Side)

TOP	MEAS.DEPTH VERT.DEPTH	1120	1424	2050	2798	4235			<del></del>	· · · · · · · · · · · · · · · · · · ·					-	 
	NAME	Yates	Seven Rivers	Queen	San Andres	Glorietta								·		
FORMATION TOP BOTTOM DESCRIPTION, CONTENTS, ETC.																
BOTTOM	4235	-														
TOP	2798										• .					
FORMATION	San Andres							:01:				(12) (12)				

### 30-015-31560

OBRED 13837 PROD 6125 POOI 96718

Geol. Tops per/BGA Salado SZC Pase of Satt 968 Gates 1119 7 Rivers 1437 Bowns 1818 Queen ZCSC

Glaybung 2440 San Andres 2798 Lovington Sd 2824 Glorieta 4235

5-15-01 PLAT EXP/AZ-LL/MCFZ/NGT 1086-4878 PLAT EXP/3D-LD/COMP NEUT/NGT 200-4867 Form 3160-4 (October 1990)

### UTTED STATES DEPARTMENT OF THE INTERIOR N.M.

SUBMIT IN DUPL TE\*

**BUREAU OF LAND MANAGEMENT** 

5. LEASE DESIGNATION AND SERIAL NO. ICON LC-054988B S. 1st Street

WELL CO	OMPLETIO	N OR RE	COMPI	LETIO	N REPO	RT AT	esia NA	A 88246	<b>128</b>	EE OR TRIBE NAI
1a. TYPE OF WEL	L: 0		LS	DRY	Other (	300 m	- 23	7. UNIT AG	REEMEN	IT NAME
b. TYPE OF COM		<b></b> "		DI	د	*	-	<i>y</i>		•
NEW X	WORK D	EEPEN P	UG	DIFF. RESVR.	Other 🚉			A. FARM	OR LEA	SE NAME, WELL
2. NAME OF OPERAT				KESTK. L			EIVED ARTESIA	Jenk	ins B	Federal #13
Mack Energy (	Corporation	· ,			7.	REL	ARTESIN	API WEL		0001
P.O. Box 960,					1505) 748	4388 <sup>CU</sup>	., -			1. OR WILDCAT
4. LOCATION OF V	VELL (Report loca	ation clearly an	d in accord	ance with a	any State red	virements)*	<u>~~</u>	<b>-</b>		s Paddock
4. LOCATION OF V				2310 FN	IL & 880 F	WE SLIL	01681			R BLOCK AND SURV
	rval reported bel					•		OR AR		,
At total depth	•				:			Sec	20-T	17S-R30E
			14. PE	RMIT NO.	<del> </del>	DATE ISS	UED	12. COUNT PARISH Ed	OR	13. STATE
·		· · · · · · · · · · · · · · · · · · ·				<u> </u>		Edd	<del>-</del>	NM
15. DATE SPUDDED	16. DATE T.D. REAC 3/5/01	HED 17. D	ATE COMPL.		/.) 18	LELEVATIONS	(DF, RKB, RT, G	R, ETC.)	19. EL	EV. CASING HEAD
2/23/01				19/01	TRIFCOUR		3637 RKB	ROTARY TO	018	3624 CABLE TOOLS
20. TOTAL DEPTH, MD 4 4880	TVD 21. PL	ug, back t.d., m 486		HOW	LTIPLE COMPL., MANY	'  ²	DRILLED BY	Yes	OL3	CABLE IOOLS
24. PRODUCING INTE	RVAL (S), OF THIS			TOM, NAME	(MD AND TV	)°				WAS DIRECTIONAL
•	•	, 4	312.5-47	15 5 Pa	ddock					SURVEY MADE Yes
26. TYPE ELECTRIC	AND OTHER LOGS			10.01 4			<del></del>	·	27. W	AS WELL CORED
,	Gamma Ray,	Neutron, I	Density,	Lateralc	g, Spectr	al Gamm	a Ray			No
28.					(Report all stri	ngs set in w	»(/ <b>)</b>			
CASING SIZE/GRADE	WEIGHT, LBJ	T DEP	TH SET (MD)	Н	OLE SIZE	TOP	OF CEMENT, CEN		D	AMOUNT PULLED
13 3/8 K-55	48		465		17 1/2		450 :			None
8 5/8 J-55	24		1090		12 1/4		600 :			None
5 1/2 J-55	17		4874		7 7/8		960 s	SX		None
29.	<u>. I</u>	LINER RECO		<u> </u>		30.		UBING REC	ORD	
SIZE	TOP(MD)	BOTTOM (MI		S CEMENT	SCREEN (		SIZE	DEPTH SET (		PACKER SET (MD)
		00110#1	JI JAJK	3 OLMENT	SOREEN		27/8	4741		
					†					
1. PERFORATION R	ECORD (Interval,	size and numbe	r)		32.	ACID,	SHOT, FRACT	URE, CEME	IT SQU	EEZE, ETC
1.					DEPTH II	TERVAL (M	D) AM			TERIAL USED
				•		.5-4715.5		2500 gals		
•	,					.5-4715.		32000 gal		
	4312.5-471	5.5 .41. 97				.5-4715.		54000 g 5000 15		
i3.				PRC	DUCTION	2.5-4715.	<u> </u>	5000 15	76 NC	L ACIU
ATE FIRST PRODUCT	ION PRO	DUCTION METHO	D (Flowing, ga			f pump)				roducing or
4/24/0			2 1/2 x 2	2 x 16' F	RHBC HVF	PAP BI	IC ·	shut-in	) ·	Producing
DATE OF TEST	HOURS TESTED	CHOKE SE		DON FOR T PERIOD	OIL-BBL.	GA	S-MCF.	WATER-BBI	-	GAS-OIL RATIO
5/2/01	24			$\longrightarrow$	175		326	456	-	1863
FLOW. TUBING PRESS.	CASING PRESSUR	CALCUL 24-HOUR		L-BBL. 175	GAS-	мсғ. 326	WATER -	ввц. 156	OIL GRAY	API (CORR.)
4. DISPOSITION OF	GAS (Sold, used f	or fuel, vented,	etc.)					<del></del>		
5. LIST OF ATTACH	MENTS				Sold	1.0	OCDICD!	OD DEC	OBD	<del>]                                    </del>
		*					CEPTED		_	
36. I hereby certify	hat the foregoin	g and attache	Informati	on is com	plete and cor	Tect (OF	IG.SGD.)			<del>\$</del> \$
SIGNED .	usa I	lat		ritle		uction A	1	1 2001 <sub>AT</sub>		5/14/01
						,				
		Instruction							+-	<del> </del>

18 Paddock   4300   4699	FORMATION TOP BOTTOM DESCRIPTION, CONTENTS, ETC.	TOP	BOTTOM	SEC	DESCRIPTION, CONTENTS, ETC.	TENTS, ETC.			Ĭ.	TOP
An Andreas San Andreas Glorietta	Tille Daddook	7200				·		NAME	MEAS.DEPTH	VERT.DEPTH
San Andreas  Consense  Con	200000	0000	404	-				Queen	2050	•
Odviete  LS - W. W. S. W. W. S. W. W. S. C. W. W. S. C. W. W. S. C. W. W. S. C. W. W. W. W. S. C. W.								San Andreas	2798	
15:0 1	*							Glorietta	4235	· ·
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STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

### URAL 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 – JENKINS B FEDERAL #14 (API# 30-015-32257)

	PURPOSE: X Secondary Recovery	Pressure Mainter	nance	Disposal	Storage
	Application qualifies for administrative approval?	Yes		old X No	,
II.	OPERATOR: COG OPERATING LLC				
*	ADDRESS: 550 WEST TEXAS AVE., SUITE 130	00, MIDLAND, TX	<u>79701</u>		
	CONTACT PARTY: GAYLE BURLESON	PHONE: <u>(43</u>	32) 685 <u>-4340</u>	<u>.</u>	
III.	WELL DATA: Complete the data required on the r Additional sheets may be attached		orm for each	well proposed for inject	etion.
IV.	Is this an expansion of an existing project?  If yes, give the Division order number authorizing	Yes the project:	X No		· · · · · · · · · · · · · · · · · · ·
V.	Attach a map that identifies all wells and leases wit drawn around each proposed injection well. This c				-half mile radius circle
VI.	Attach a tabulation of data on all wells of public rec Such data shall include a description of each well's schematic of any plugged well illustrating all plugg	type, construction, o			
VII.	Attach data on the proposed operation, including:		,		
	<ol> <li>Proposed average and maximum daily rate and</li> <li>Whether the system is open or closed;</li> <li>Proposed average and maximum injection press</li> <li>Sources and an appropriate analysis of injection produced water; and,</li> <li>If injection is for disposal purposes into a zone chemical analysis of the disposal zone formation wells, etc.).</li> </ol>	sure;  n fluid and compatible  not productive of oil	ility with the	within one mile of the	proposed well, attach a
*VIII.	Attach appropriate geologic data on the injection z depth. Give the geologic name, and depth to botton total dissolved solids concentrations of 10,000 mg/known to be immediately underlying the injection	m of all underground /I or less) overlying t	sources of	drinking water (aquifers	s containing waters wit
IX.	Describe the proposed stimulation program, if any.				
*X.	Attach appropriate logging and test data on the wel	l. (If well logs have	been filed w	vith the Division, they n	need not be resubmitted
*XI.	Attach a chemical analysis of fresh water from two injection or disposal well showing location of wells			ilable and producing) v	vithin one mile of any
XII.	Applicants for disposal wells must make an affirm data and find no evidence of open faults or any oth sources of drinking water.				
XIII.	Applicants must complete the "Proof of Notice" sec	ction on the reverse s	side of this fo	orm.	
XIV.	Certification: I hereby certify that the information s and belief.	submitted with this a	pplication is	true and correct to the	best of my knowledge
	NAME: BRIAN WOOD	kel)		TITLE: <u>CO</u>	NSULTANT
	SIGNATURE:	u f		DATE: <u>FE</u>	<u>3. 5, 2007</u>
*	E-MAIL ADDRESS: <u>brian@permitswest.com</u> If the information required under Sections VI, VIII, Please show the date and circumstances of the earlie		s been previ	ously submitted, it need	I not be resubmitted.



- 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.

TICE: 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.

# OPERATOR: COG OPERATING LLC

WELL NAME & NUMBER: JENKINS B FEDERAL #14

WELL LOCATION:

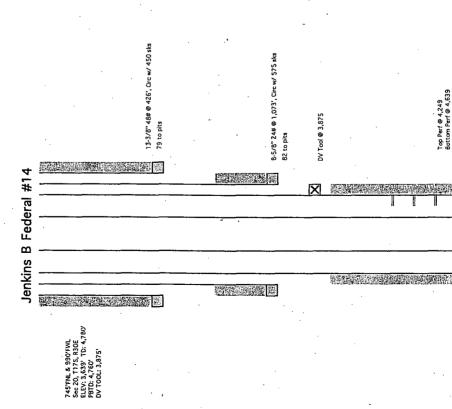
FOOTAGE LOCATION 745' FNL & 990' FWL

UNIT LETTER

17 S

RANGE 30 E

### WELLBORE SCHEMATIC



Method Determined: Circulated Casing Size: 13-3/8" WELL CONSTRUCTION DATA TOWNSHIP Surface Casing 20 SECTION Top of Cement: Surface Cemented with: 450 sx Hole Size: 17-1/2"

£

Intermediate Casing

Casing Size: 8-5/8" 0 Cemented with: 575 sx Hole Size: 12-1/4"

Ħ3

Top of Cement: Surface

Method Determined: Circulated

Production Casing

Hole Size: 7-7/8"

Casing Size: 5-1/2"

Cemented with: 1035 sx

Top of Cement: Surface

Total Depth: 4744'

Method Determined: Circulated

£3

or

Injection Interval

4639 feet <u>2</u> 4249 feet

(Perforated)

5-1/2" 11.6#,J-55@ 4,744',1st stg 210 sks Circ 44 sks. 2nd stage 825 sks. Circ 33sks

2-7/8", J-55 @ 4,642'

## INJECTION WELL DATA SHEET

Lining Material: PLASTIC Tubing Size: 2-7/8"

Type of Packer: MODEL R INJECTION PACKER

Packer Setting Depth: APPROXIMATELY 100' ABOVE HIGHEST PERFORATION

Other Type of Tubing/Casing Seal (if applicable):

### Additional Data

If no, for what purpose was the well originally drilled? OIL PRODUCTION Yes Is this a new well drilled for injection?

X No

- Name of the Injection Formation: PADDOCK MEMBER OF THE YESO FORMATION
- Name of Field or Pool (if applicable): LOCO HILLS; PADDOCK (#96718)
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. NO
- OVER: GRAYBURG JACKSON; SR-O-SA-G-SA (BOTTOM @ 4,044' IN JENKINS B FEDERAL #17) Give the name and depths of any oil or gas zones underlying or overlying the proposed UNDER: BLINEBRY (TOP @ 4,780' IN JENKINS B FEDERAL #18) injection zone in this area:

Well: Jenkins B Federal # 14

745'FNL & 990'FWL Sec 20, T17S, R30E

ELEV: 3,639'

TD: 4,780'

**DF:** ?

PBTD: 4,760°

**KB:** ?

DV TOOL: 3,875' Pumping Unit: ?

Casing

ТҮРЕ	SIZE, in	WEIGHT, lbs/ft	GRADE	ТОР	воттом	CEMENT
SURFACE	13-3/8	48#	K-55	SURFACE	426'	Circ w/ 450 sks, 79 sks to pit
INTERMEDIATE	8-5/8	24#	J-55	SURFACE	1,073'	Circ w/ 575 sks, circ 82
INTERMEDIATE	5-1/2	15.5#	J-55	SURFACE	4,744'	210 sks Circ. 44 sx . 2nd stage c/w 575 & 250 sx Circ. 33sx.
PROD. LINER	2-7/8		J-55	SURFACE	4,642'	

**PERFS**:4249.5,51,55,57,59,84.5,89,91.5,95,97,99,4301,09.5,12,14,17,20.5,23.5,26.5,31, 34,36,38.5,40.5,43.5,45.5,47.5,49.5,75,77,88.5,4407,11,14.5,17,23,24.5,30,34,35.5,38.5,4 1,42.5,48,49.5,55,57,61,63,64.5,67.5,70.5,72,74,78,80,84,86,88,91,92.5,94,96.5,98,99.5,4 502,04,17,18.5,20.5,22.5,24,25.5,27.5,37.5,40,42,65,68.5,73,75,77,79.5,82.5,91.5,95,99,4 601.5,10.5,13,19.5,25.5,28,36,39

6/9/2002- Spud Date

06/29/2002- RU Schlumberger & run PDC & perf. 4249.5-4639 95 holes.

07/01/2002- RIH w/5 1/2" PPI tool. RU BJ & acidize w/2500 gals 15% NEFE & 285 balls. Breakdown @ 1355# @ 4.19 bpm. Avg. Rate 6 Avg. PSI 1900# ISIP 991# 5 min. 422# 10 min. 241# 15 min. 105#. Balled off 4800# w/109 balls. Rev. out & PPI perfs. Trip Pkr. RU & pull 5 swab runs 5th run taggedf @ 1500' w/15% oil cut. Ready for hot acid job.

**07/02/2002-** RU BJ & pump hot acid job 32,000 gals 20% heated HCL & 54,000 gals heated 40# gel in 25 & 41 bbl stages. Drop 100 balls 1000# block in 10 stages. Avg. Rate 6 bpm Avg. Psi 1386# ISIP 890# 5 min. 727# 10 min.619# 15 min. 551#. Pump 5000 gals cold 15% HCL @ 2 bpm @ 520#. Flush w/90 bbls FW @ 2 bpm @ 482# ISIP 335# 5 min. 270# 10 min. 223# 15 min. 190#. Well dead in 15 min. Release Pkr. & POH. RIH w/149 jts 2 7/8" J-55 tbg. SN @ 4642' TA @ 4147' w/133 jts. RIH w/2 1/2x2x16' RHBC HVR PAP BNC pump. 74 used type 97 wcn 1" rods & 110 new type 97 wcn 3/4" rods. 2'x3/4" pony.

02/2006- Production totals of the Paddock 51,453 bbls oil & 169,960 MCF gas

### '"ITED STATES DEPARTMENT OF THE INTERIOR

SUBMIT IN DUPLICATE OF

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NO. **BUREAU OF LAND MANAGEMENT** 

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1a. T	YPE OF WE	LL:	OIL	×	7 G	SAS VELL	7	DRY 🔲	Oth					7. UNIT AC	REEN	MENT NAME
b. T	YPE OF CO	MPLETION:		<u>.</u>	34 T	AECE 1		בבו ואט	Oth							
	NEW X	WORK OVER	DEE	PEN	7 6	LUG	DIE	SVR.	Oth	10r		_		8. FARM	OR L	EASE NAME, WELL NO
2. NAR	AE OF OPERA		==	<del></del>	<del></del>		<u>                                  </u>	3 V R. C.		1	3 4	56>		Jen	kins	B Federal #14
Мас	k Energy	Corporat	tion /	/					ß	<sup>3</sup> 3,	Δ	· /o		9. API WE	L NO	•
	DRESS AN								<del>/27</del>		<b>7</b> -		<del>2</del>	+	30-0	15-32257 SI
P.O.	Box 960	, Artesia,	<b>NM 88</b>	3211	-0960	)		R	<b>5</b> 05)	748-12	28 <b>3</b> ^	02	<u> </u>	IO. FIELD		OOL, OR WILDCAT
4. LO	CATION OF	WELL (Rep	ort locati	ion cle	arly a	nd in .	accordanc	e with a	Sta	ate reguir	enen	its)*	73	Lo	со Н	ills Paddock
Ats	urface						74	45 FN	<u> </u>	OU EAN	EIVE	:0	73	L		., OR BLOCK AND SURVEY
Át t	op prod. int	erval report	ed belov	~				/	S	000-7	4K I I	ESIA	Z/	OR AF	REA	
								,	/3.				<i>5</i> 7/			•
At t	otal depth								1,5	_حح		ركما به	7			T17S, R30E, D
			÷			. [	14. PERMIT	NO.		6151	04 FE	JSSUED		12. COUNT	YOR	13. STATE
							···							Ed	dy	NM
	E SPUDDED	16. DATE T.		ED	17. 0	DATEC	OMPL. (Rea		.)	18. E	LEVAT	-	RKB, RT, GR	t, ETC.)*	19.	ELEV. CASING HÉAD
	5/9/02	6/	22/02				7/2/0						2' RKB		Ш.	3639'
20. TOT	AL DEPTH, ME		21. PLUC	, BAC			VD 2	2. IF MULT HOW M		COMPL,			ERVAL\$	ROTARY T		CABLE TOOLS
	4780		<u> </u>		476									Yes		
24. PR	ODUCING IN	ERVAL (S), (	OF THIS (	COMP	LETION	4 - TOI	P, BOTTON	i, NAME	A GM)	ND TVD)*					2	SURVEY MADE
						4246	3 E 4090	N. Darati	al a. a. l.						1	
						4243	9.5-4639	Pad	UOCH						1 2	Yes
26. TY	PE ELECTRIC	Gamma			ron.	Den	sitv I a	teralo	a Si	nectral	Gar	nma F	Pav		27.	WAS WELL CORED
28.			,	-	,		ING REC								<u> </u>	
	NG SIZE/GRAD	E WEIGH	IT, LB/FT		DE		T (MD)		OLE SI		3 301		EMENT, CEM	ENTING RECO	RD	AMOUNT PULLED
13	3/8 K-55		48			426			17 1/	12			450 s			None
	5/8 J-55		24			107			12 1/				575 s			None
	1/2 J-55		17			477			7 7/8				1035 9		•	None
	10055	TED FO	DDE	$\sim$ $\sim$ $\sim$	Š	-				i				•		
29.	ACCE	TED FO	17 174	MEY	REG	ORD						30.	Т	UBING REC	ORD	
							PACKER SET (MD)									
		AUG 3 0 2002 27/8 4642'														
				_\										··		
11. PEI	FORATION	RECORD (Int	terval, si: (LA)		ünme	70.0,010.7										
	AL	LEXIS C. SWOBODA DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED														
	PETROLEUM ENGINEER 4249.5-4639' 2500 gals 15% NEFE 4249.5-4639' 32000 gals 20% HCL															
	•								-				-			
		4249.	.5-463	9', .4	1, 95	3			-	4249.5			<del> </del>			40# gel
3.	(2.10,0 1000							15 /6 acid								
DATE F	RST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump)  WELL STATUS							Producing or Producing								
ATE C	F TEST	2 1/2x2x16' Pump shu(-in) Prod							GAS-OIL RATIO							
		ı			10114 01		TEST P							ł .		
	28/02	24 N	ours		244 600	4750		$\rightarrow$ $\bot$	→ 107   198   159   1850						<u> </u>	
FLOW.	TUBING PRES	S. CASING P	RESSURE		ALCUL 4-HOUI		OIL-B	107		GAS-MC	er. 198		WATER -	вв <b>.</b> . 59	OIL G	RAVITY - API (CORR.)  38
4. DIS	POSITION O	F GAS (Sold,	used for	fuel, v	rented,	etc.)			Sold	•					•	
5. LIS	T OF ATTAC	MENTS								·						- x
		_			٠.		Devi	ation	Surv	rey, Log	as					
6. I h	ereby certify	that the fo	regaina	and a	ttache	d info						determi	ned from a	il available	recor	rds
	/	, -	1)	//-	1_					Produc					•	8/20/02
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ck 4173 4647 MEASDRIFTIN MEASDRIFTIN THE MEASURE THE M	FORMATION TOP BOTTOM DESCRIPTION CONTENTS, ETC.	TOP	BOTTOM		DESCRIPTION, CONTENTS, 17TC.	TS. ETC.		TOP	
Yates Seven Rivers Queen Sain Andres Glorietta							NAME	MEAS.DEPTH	TRUE VERT.DEPTII
Seven Rivers  Queen San Andres Glorietta		41/3	404/				Yates	1106	
Queen San Andres Glorietta	•					•	Seven Rivers	1403	
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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

	APPLIC	CATION FOR AUT	<u>HORIZATION</u>	TO INJECT –	<u>JENKINS B F</u>	EDERAL #1 (API#	<u> </u>	<u> 14214)</u>
	•	X Secondary Recovulatifies for administra	•	Pressure Mai	-	DisposalX No		Storage
п.	OPERATOR:	COG OPERATING	LLC					
	ADDRESS: 55	50 WEST TEXAS A	VE., SUITE 130	0, MIDLAND, 7	TX 79701	,	•	
•	CONTACT PA	ARTY: <u>GAYLE BU</u> F	RLESON	PHONE:	(432) 685-4340			
III.	WELL DATA	: Complete the data r Additional sheets m			s form for each	well proposed for in	ijection.	
IV.		nsion of an existing p Division order numb		Yes he project:	<u>X</u> No			
<b>V</b> .		hat identifies all well each proposed injecti					one-half n	nile radius circle
VI.	Such data shall	ation of data on all we I include a description ny plugged well illus	n of each well's t	ype, constructio				
VII.	Attach data on	the proposed operati	on, including:	•	•			
•	<ol> <li>Whether th</li> <li>Proposed a</li> <li>Sources an produced y</li> <li>If injection</li> </ol>	is for disposal purpo nalysis of the disposa	losed; injection pressings of injection ses into a zone r	ure; fluid and compa not productive of	atibility with the	within one mile of t	he propos	sed well, attach a
*VIII.	depth. Give th total dissolved	riate geologic data or e geologic name, and I solids concentration nmediately underlyir	depth to bottom s of 10,000 mg/l	of all undergro or less) overlying	und sources of	lrinking water (aqui	fers conta	ining waters with
IX.	Describe the pr	roposed stimulation p	rogram, if any.	•			•	
*X.	Attach appropr	iate logging and test	data on the well	. (If well logs ha	ave been filed w	ith the Division, the	y need no	ot be resubmitted
*XI.		cal analysis of fresh v posal well showing lo				ilable and producing	g) within (	one mile of any
XII.		disposal wells must no evidence of open f nking water.						
XIII.	Applicants mus	st complete the "Proc	f of Notice" sec	tion on the rever	se side of this fo	orm.		
XIV.	Certification: I and belief.	hereby certify that th	ne information su	ubmitted with th	is application is	true and correct to t	he best of	my knowledge
	NAME: BRIA	N WOOD	72.11			TITLE: 9	CONSUL	<u>TANT</u>
	SIGNATURE:		1. 200	BEL		DATE: <u>I</u>	EB. 5, 20	007
*	If the informati	RESS: <u>brian@permi</u> on required under Se e date and circumstan	ctions VI, VIII,		has been previo	ously submitted, it n	eed not be	e resubmitted.



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- 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.

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 - JENKINS B FEDERAL #17R (API# 30-015-34138)

	PURPOSE: X Secondary Recovery Pressure Maintenance Disposal Storage Application qualifies for administrative approval? Yes X No
fT	
II.	OPERATOR: COG OPERATING LLC
	ADDRESS: 550 WEST TEXAS AVE., SUITE 1300, MIDLAND, TX 79701
	CONTACT PARTY: GAYLE BURLESON PHONE: (432) 685-4340
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 Yes 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:
	<ol> <li>Proposed average and maximum daily rate and volume of fluids to be injected;</li> <li>Whether the system is open or closed;</li> <li>Proposed average and maximum injection pressure;</li> <li>Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,</li> <li>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.).</li> </ol>
*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
*XI.	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.
XIV.	Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
	NAME: BRIAN WOOD TITLE: CONSULTANT
	SIGNATURE: DATE: FEB. 5, 2007
*	E-MAIL ADDRESS: <u>brian@permitswest.com</u> 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:

## I. 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.

TICE: 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.

## INJECTION WELL DATA SHEET

OPERATOR: COG OPERATING LLC

WELL NAME & NUMBER: JENKINS B FEDERAL #17R

WELL LOCATION:

330' FNL & 1525' FWL FOOTAGE LOCATION

WELLBORE SCHEMATIC

Jenkins B Federal #17R

330°FNL & 1525°FWL Sec 20, 7175, R30E ELEV: 3,638° TD: 4,735° PBTD: 4,713° DV TOOL: 2,534

UNIT LETTER

SECTION

17.S TOWNSHIP

30 E RANGE

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17-1/2"

Cemented with: 448 sx

Top of Cement: Surface

13-3/8" 48# @ 448', Grc w/ 448 sks

61 to pits

Casing Size: 13-3/8"

or

 $\mathbb{H}^3$ 

Method Determined: Circulated

Intermediate Casing

Hole Size: 12-1/4"

Cemented with: 750 sx

Top of Cement: Surface

8-5/8" 24# @ 1,047', Circ w/ 750 sks

170 to pits

or

Casing Size: 8-5/8"

Method Determined: Circulated

 $\mathfrak{t}\mathfrak{t}_{3}$ 

Production Casing

Hole Size: 7-7/8"

Cemented with: 940 sx

£3

Casing Size: 5-1/2"

Method Determined: Logged

Top of Cement: 320'

lop Perf @ 3,354, 3ottom Perf @ 3,540 Top Perf @ 3,793, Bottom Perf @ 4,044

Top Perf @ 3,018, Bottom Perf @ 3,248

DV Tool @ 2,534"

Total Depth: 4726'

Injection Interval

4653 feet to 4268 feet

(Perforated)

S-1/2" 11.6#,J-55@ 4,726',1st stg 430 sks Circ 67 sks. 2nd stage 460 sks. TOC@ 320'

2-7/8", 1-55 @ 4,654

Top Perf @ 4,268 Bottom Perf @ 4,653

## INJECTION WELL DATA SHEET

Lining Material: PLASTIC Tubing Size: 2-7/8"

Type of Packer: MODEL R INJECTION PACKER

Packer Setting Depth: APPROXIMATELY 100' ABOVE HIGHEST PERFORATION

Other Type of Tubing/Casing Seal (if applicable):

## Additional Data

If no, for what purpose was the well originally drilled? OIL PRODUCTION Yes Is this a new well drilled for injection?

X No

- Name of the Injection Formation: PADDOCK MEMBER OF THE YESO FORMATION
- Name of Field or Pool (if applicable): LOCO HILLS, PADDOCK (#96718)
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. YES

DHC WITH SAN ANDRES (3018' - 4044'); WILL SQUEEZE

Give the name and depths of any oil or gas zones underlying or overlying the proposed njection zone in this area:

OVER: GRAYBURG JACKSON; SR-Q-SA-G-SA (BOTTOM @ 4,044' IN JENKINS B FEDERAL #17) UNDER: BLINEBRY (TOP @ 4,780' IN JENKINS B FEDERAL #18) Well: Jenkins B Federal # 17R

330'FNL & 1525'FWL Sec 20, T17S, R30E

**ELEV: 3,638'** 

TD: 4,735'

**DF:** ?

PBTD: 4,713'

**KB:** ?

DV TOOL: 2,534 Pumping Unit: ?

Casing

ТҮРЕ	SIZE, in	WEIGHT, lbs/ft	GRADE	TOP	воттом	CEMENT
SURFACE	13-3/8	48#	H-40	SURFACE	448'	Circ w/ 448 sks, 161 sks to pit
INTERMEDIATE	8-5/8	24#	J-55	SURFACE	1,047'	Circ w/ 750 sks, 170 to pits
INTERMEDIATE	5-1/2	15.5#	J-55	SURFACE	4,726'	430 sks Circ. 67 sx . 2nd stage c/w 260 & 200 sx TOC @320'
PROD. LINER	2-7/8		J-55	SURFACE	4,654'	

PERFS:

4268.5-4653' 1 SPF 85 holes.

3793-4044.5 2 SPF 64 holes. 3354-3540.5 2 SPF 58 holes. 3018.5-3248 2 SPF 62 holes.

11/10/2005- Spud Date

12/28/2005- Perf. 4268.5-4653' 1 SPF 85 holes.

12/29/2005- RIH PPI perfs w/1900 gals 15% NEFE acid fish valves & reverse out 60 bbls. Set Pkr. @ 4175' open bypass spot acid & balls to Pkr. close bypass & acidize w/3100 gals NEFE acid & 250 balls. Balled off 3800# w/185 balls on. Avg. Rate 6.5 bpm A vg. Psi 2300# ISIP 1184# 5 min. 690# 10 min. 294# 15 min. 63# RU & swab. 5th run tagged @ 800' well flowed 15 min. w/stain oil 6th run had scattered fluid w/15% oil cut. Trip Pkr.

**12/30/2005-** RU BJ & pump hot acid job32,000 gals heated 20% HCL & 54,000 gals heated 40# linear gel in 25 & 41 bbl stages dropped 80 balls & 1000# block in 10 stages. Avg. Rate 6 bpm Avg. Psi 1125# ISIP 623# 5 min. 460# 10 min. 335# 15 min. 220#. Pump 5000 gals cold 15% @ 2 bpm @ 120# Flush w/90 bbls FW @ 2 bpm @ 171#. ISIP 0.Well didn't flow back.

**01/02/2006-** Release Pkr. RIH couldn't break circ. w/420 bbls tag 2' fill POH w/Pkr. RU Schlumberger & perf. 3793-4044.5 2 SPF 64 holes.

**01/03/2006**- RIH w/5 1/2" PTBP & PPI tool. Set PTBP @ 4123' & test 2500#. PPI perfs w/600 gals 15% NEFE acid fish valves Set Pkr. @ 3730' & acidize w/2200 gals 15% NEFE acid & 200 balls. Balled off 4135# w/180 balls. Avg. Rate 5.9 bpm Avg. Psi

2895# ISIP 1737# 5 min. 1359# 10 min. 1258# 15 min. 1188#. Well flowed back 5 min. RU pull 6 swab runs 6th run pulled 400' fluid w/10% oil cut. Trip Pkr.

**01/04/2006-** RU BJ & frac. w/500 gals Technihib ahead start 1/4# 16/30 white sand in 30# linear gel pump 32,500 gals total w/.15# -.35# 14/30 lite prop 125. Start 1/2-3# 16/30 white sand 75,680# & 15,660# 16/30 SiberProp @ 3# Flush w/80 bbls 40# linear gel. Avg. Rate 80 bpm Avg. Psi 3200# ISIP 2340# 5 min. 1919# 10 min. 1796# 15 min. 1723#.

01/05/2006- Perf. 3354-3540.5 58 holes.

**01/06/2006-** Did ball job with 1900 gals. 15% NEFE and 150 ball sealers. Balled out to 4500 Psi with 104 balls. Avg. psi-1900, avg. rate-6.3 BPM. ISIP-1272, 5 min.-1169, 10 min.-1104, 15 min.-1063. Bled off, made 1 swab run and well flowed acid for 10 minutes. Swab dry with 3 more runs. Wait 1 hr., rec. 400' fluid with 1-2% oil. Wait another hr. rec. 400' fluid with 5% oil. Unset Pkr. and POH. NU frac valve.

**01/09/2006**- Perforate 3018.5'-3248' 2/SPF 62 holes. Did PPI job and ball job with 2500 gals. 15% NEFE. Job communicated down. Unset Pkr. and POH. RIH with overshot and 30 stds.

**01/10/2006-** Finish running in hole and circ. balls off of RBP and unset. POH and RIH with SN and TAC. Land SN @ 4654' with 145 jts. 2 7/8". TAC @ 2891' with 90 jts. Ran rods and pump. 2 1/2"x2"x20' RHTC, 2'x3/4" pony, 105-3/4" rods and 80-7/8" rods, all new. Space out with 6' pony and hang on. Rig down.

02/2006- Production totals of the Paddock 1,683 bbls oil & 5,859 MCF gas

02/2006- Production totals of the Queen/San Andres 903 bbls oil & 3,131 MCF gas

Form 3160-4 (October 1990)

## **UNITED STATES** DEPARTMENT OF THE INTERIOR

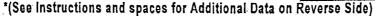
SUBMIT IN DUPLICATE\*
(See other instruction on

FOR APPROVED OMB NO. 1004-0137 Expires: December 31,1991

reverse side)

5. LEASE DESIGNATION AND SERIAL NO.

		BUR	EAU O	F LAN	DMA	NAGEM	ENT	V.	א-עג	KIL	SIA	• *		LU-05		
WELL CO	OMPLE	TION	OR R	ECO	MPL	ETIO	N RE	POR	TAN	D LC	og*	6. 1	INDIAN	I, ALLOT	TEE OR	TRIBE NAME
1a. TYPE OF WEL	L:	OIL WELL	M	GAS WELL	7		Oth		REC	EIV	<u>-</u> D	7. U	NIT AGF	REEMENT	NAME	
b. TYPE OF COM	PLETION:	WELL	IZSI .	WELL L		DRY L	) Oth	or								
NEW WELL	WORK C	DEEPE	<b>'</b> П	PLUG F	1	RESVR.	Oth	er	FEB	27 20	006	8. F	ARM O	R LEAS	E NAM	E, WELL NO
2. NAME OF OPERAT				באטוו ב		CESVR. L			7CU-7	MII	AICE		Jenki	ins B F	edera	al #17
Mack Energy (	Corporat	ion			•			•				9. A	PI WELL	NO.	<del></del>	
3. ADDRESS AND													3	30-015-	34138	0051
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At top prod. inte	rval report	ed below											ON ARE			
At total depth														20-T1	7S-R3	30E
		•		Γ	14. PERM	AIT NO.			DATE IS	SUED		12.	PARISH Edd	OR	13. 57	
						<u>.</u>		<u></u>								MM
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20. TOTAL DEPTH, MD	L TVD	21. PLUG,			מ׳	22. IF MUL		OMPL.		23. INTE	RVALS	ROT	ARY TO	DLS .	CABL	E TOOLS
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26. TYPE ELECTRIC	AND OTHER Gamma	LOGS RU	N.								av		·	27. WAS	S WELL	CORED
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33.					· · · · · · · · · · · · · · · · · · ·	PRO	рист	ION			<del></del>		<del></del>			
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DATE OF TEST	HOURS TE	STED	CHOKE	SIZE		'N FOR PERIOD	OIL-E	BL.	G	SAS-MC	F.	WAT	ER-BBL	.	GÀS-OIL	. RATIO
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FLOW. TUBING PRESS	CASING P	RESSURE		ULATED UR RATE	OIL	-BBL.		GAS-M	CF.	.	WATER - B	BL.	1	OIL GRAVI	TY - API (	CORR.)
<del></del>			24410	OK KATE		72			101		41	0				
34. DISPOSITION OF	GAS (Sold,	used for f	uel, vente	d, etc.)			Sold	· ·		A	CEPT	-D	-OR	RECU	ואט	
35. LIST OF ATTACH	MENTS		<del></del>					·	· ·	+	<b>III 3</b> (	D.)	DAY	M E	E CH	200
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36. I hereby certify	that the for	egoing a	nd attacl	hed info						termin	ed from al	<u>/</u> ava			-	
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FORMATION	TOP	BOTTOM	FORMATION TOP BOTTOM PRESCRIPTION CONTENTS HTC			
			DESCRIPTION, CONTENTS, ETC.	NAME	TOP	)P
Paddock	4268	4653			МЕАS.DEРТН	VERT DEPTH
San Andres	3018	4044		Yates	1116	
				Seven Rivers	1413	./
	·			Queen	2029	
i *	· .		Bureau of Land Managoment	San Andres Glorietta	2756	
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	·		Carlsbad Field Office Carlsbad, N.M.			
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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 – JENKINS B FEDERAL #18 (API# 30-015-34474)

	PURPOSE: X Secondary Recovery Pressure Maintenance	Disposal	Storage
_	Application qualifies for administrative approval?Yes	$\underline{\mathbf{X}}$ No	
II.	OPERATOR: <u>COG OPERATING LLC</u>		
	ADDRESS: 550 WEST TEXAS AVE., SUITE 1300, MIDLAND, TX 79701		
	CONTACT PARTY: GAYLE BURLESON PHONE: (432) 685-4:	<u>340</u>	•
III.	WELL DATA: Complete the data required on the reverse side of this form for ea Additional sheets may be attached if necessary.	ach well proposed for injec	tion.
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 drawn around each proposed injection well. This circle identifies the well's area		-half mile radius circle
VI.	Attach a tabulation of data on all wells of public record within the area of review Such data shall include a description of each well's type, construction, date drille schematic of any plugged well illustrating all plugging detail.		
VII.	Attach data on the proposed operation, including:		
	<ol> <li>Proposed average and maximum daily rate and volume of fluids to be injecte</li> <li>Whether the system is open or closed;</li> <li>Proposed average and maximum injection pressure;</li> <li>Sources and an appropriate analysis of injection fluid and compatibility with produced water; and,</li> <li>If injection is for disposal purposes into a zone not productive of oil or gas at chemical analysis of the disposal zone formation water (may be measured or wells, etc.).</li> </ol>	the receiving formation if	oroposed well, attach a
*VIII.	Attach appropriate geologic data on the injection zone including appropriate lith depth. Give the geologic name, and depth to bottom of all underground sources total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposition of the immediately underlying the injection interval.	of drinking water (aquifers	containing waters with
IX.	Describe the proposed stimulation program, if any.		
*X.	Attach appropriate logging and test data on the well. (If well logs have been file	d with the Division, they n	eed not be resubmitted)
*XI.	Attach a chemical analysis of fresh water from two or more fresh water wells (if injection or disposal well showing location of wells and dates samples were taken		vithin one mile of any
XII.	Applicants for disposal wells must make an affirmative statement that they have data and find no evidence of open faults or any other hydrologic connection between sources of drinking water.		
XIII.	Applicants must complete the "Proof of Notice" section on the reverse side of this	is form.	
XIV.	Certification: I hereby certify that the information submitted with this application and belief.	n is true and correct to the	best of my knowledge
•	NAME: BRIAN WOOD	TITLE: <u>CO</u>	NSULTANT
	SIGNATURE:	DATE: FEE	3. 5, 2007
.*	E-MAIL ADDRESS: <u>brian@permitswest.com</u> If the information required under Sections VI, VIII, X, and XI above has been pre-	eviously submitted it need	not be resubmitted

Please show the date and circumstances of the earlier submittal:



- 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.

OTICE: 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.

# OPERATOR: COG OPERATING LLC

WELL NAME & NUMBER: JENKINS B FEDERAL #18

WELL LOCATION:

FOOTAGE LOCATION 330' FNL & 430' FWL

 $\frac{D}{UNIT}$  LETTER

TOWNSHIP

30 E RANGE

WELLBORE SCHEMATIC

Jenkins B Federal #18 330/FNL & 430/FWL Sec 20, T175, R30E EEC: 3,641 TD: 6,401 PBTD: 6,389' KB: 13' DV TOOL: 4,135'

 $\frac{20}{\text{SECTION}}$ 

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17-1/2"

Cemented with: 449 sx

Top of Cement:

13-3/8" 48# @ 425', Circ w/ 449 sks

Casing Size: 13-3/8"

or

 $\mathbb{H}^3$ 

Method Determined:

Intermediate Casing

Hole Size: 12-1/4"

Casing Size: 8-5/8"

Cemented with: 525 sx

Top of Cement: 1,200'

8-5/8" 24# @ 1,047', Circ w/ 525 sks

141 to pits

Method Determined: Logged

or

Ħ3

Production Casing

Hole Size: 7-7/8"

Top Perf @ 5,082 Bottom Perf @ 5,412

DV Tool @ 4,135

Casing Size: 5-1/2"

Cemented with: 1,505 sx

Top of Cement: Surface

Total Depth: 6389'

Method Determined: Calculated

or

£3

Injection Interval

4629.5 feet 4260.5 feet to

(Perforated)

5-1/2" 11.6#,J-55@ 6,389,1st stg 490 sks Circ 246 sks, 2nd stage 1015 sks. Circ 90 sks

2-7/8", 1-55 @ 4,888"

fop Perf @ 5,984 3ottom Perf @ 6,181

## INJECTION WELL DATA SHEET

Lining Material: PLASTIC Tubing Size: 2-7/8"

Type of Packer: MODEL R INJECTION PACKER

Packer Setting Depth: APPROXIMATELY 100' ABOVE HIGHEST PERFORATION

Other Type of Tubing/Casing Seal (if applicable):

## Additional Data

If no, for what purpose was the well originally drilled? OIL PRODUCTION Yes Is this a new well drilled for injection?

% N

- Name of the Injection Formation: PADDOCK MEMBER OF THE YESO FORMATION
- Name of Field or Pool (if applicable): LOCO HILLS; PADDOCK (#96718)
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. XES

BLINEBRY (5082' – 6181'), WILL SET CIBP @ 4,730' WITH 20' CEMENT ON TOP OF CIBP

OVER: GRAYBURG JACKSON; SR-Q-SA-G-SA (BOTTOM @ 4,044' IN JENKINS B FEDERAL #17R) Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: 5.

Well: Jenkins B Federal # 18

330'FNL & 430'FWL Sec 20, T17S, R30E

**ELEV: 3,641'** 

TD: 6,401'

**DF:** ?

PBTD: 6,389'

KB: 13'

DV TOOL: 4,135' Pumping Unit: ?

Casing

	SIZE,	WEIGHT,				
TYPE	in	lbs/ft	GRADE	TOP	BOTTOM	CEMENT
SURFACE	13-3/8	48#	H-40	SURFACE	425'	Circ w/ 449 sks, 149 sks to pit
INTERMEDIATE	8-5/8	24#	J-55	SURFACE	1,047'	Circ w/ 525 sks, circ 141
						490 sks Circ. 246 sx . 2nd stage c/w 865 & 150 sx Circ.
INTERMEDIATE	5-1/2	15.5#	J-55	SURFACE	6,389'	90sx.
PROD. LINER	2-7/8		J-55	SURFACE	4,888'	

**PERFS:** 5984.5,86,91.5,95.5,6003.5,06.5,09.5,17.5,19.5,21,24,58,70,87,90,92.5,97,99.5, 6105.5,07.5,13.5,15.5,17.5,26,28.5,44,52.5,54.5,59.5,66,72,77,79.5,81.5 5082.5,5116.5,20.5,24,27.5,34,68,71,72.5,75,78.5,87,88.5,94,96,5208.5,11,25,47.5,51.5,5 9.5,67,99.5,5380,86,90.5,94,5401,08,12.5 2/SPF 60 holes

## 2/06/06- Spud Date

**03/11/2006**- Rig up Schlumberger and ran PDC and perforated 5984.5'-6181.5' 34 settings 2/SPF 68 holes. Rig wireline down.

**03/13/2006**- RIH with 5 1/2" PPI and 2 7/8" tbg. run to 6204' w/ 198jts and pickle tbg with 2bbls acid and drop SV & FCV. 2500gal 15% PPI/ball job, spot 17bbls acid and PPI all perfs, all open, 1 communicated. Pull up to 5918' w/ 189jts and fish FCV & SV set PPI to treat. Drop 204 balls, 16 balls every 3bbls. Balled off to 4400psi w/ 144balls on. AR-6bpm AP-2900psi ISIP-2268psi 5min-2097psi 10min-2029psi 15min-1974psi. Swabbed well dry in 11runs IFL-surface FFL-5500' started seeing oil on the on 6th swab, on last run saw 8-10% oil.

**03/14/2006-** NU frac valve and pump 5 tank hybrid frac, 43,176 gals. 30# linear gel, 54,550 gals. 40# linear gel, 8,000 lbs. LiteProp 125 14/30, 75,620 lbs. White 16/30 and 15,520 lbs. SiberProp 16/30. Min psi-2720, avg. psi-4550, max psi-5010, avg. rate-74 BPM, max rate-77 BPM. ISIP-3635, 5 min.-3047, 10 min.-2932, 15 min.-2855.

**03/15/2006**- Perforate 5082.5'-5412.5' 30 settings 2/SPF 60 holes. Rig wireline down and RIH with RBP and PPI tool. PPI and acidize with 2500 gals. 15% NEFE and 180 ball sealers. Every perf open, ball out to 5000 psi with 108 balls. Avg. psi-2900, avg rate-6.3 BPM, ISIP-2270, 5 min.-1936, 10 min.-1870, 15 min.-1855.

**03/16/2006-** NU frac valve and pump 5 tank hybrid frac, 41,487 gals. 30# linear gel, 53,718 gals. 40# linear gel, 8,000 lbs. LiteProp 125 14/30, 75,000 lbs. White 16/30 and 15,000 lbs. SiberProp 16/30. Min psi-3467, avg. psi-3623, max psi-3779, avg. rate-81 BPM. ISIP-2605, 5 min.-2269, 10 min.-2178, 15 min.-2045.

**03/17/2006-** RIH with SN and TAC. wash 90' sand and land SN @ 6203' w/198 jts. 2 7/8" J-55. TAC @ 4888' w/156 jts. TAC did not set. Ran in hole with 2 1/2"x2"x24' RHTC, 2'x3/4" pony, 167-new T-66 3/4" rods and 77-new T-66 7/8" rods. Hang on and rig down.

Form 3160-4 (October 1990)		UNIT	ED STA	ATES	SUBMIT		other in-	( Exp	FOR AF	PROVED , 1004-0137 ember 31,1991
CO-AR	ESDEPAR BL	RTMEN JREAU OF	T OF TI LAND MAI	HE IN NAGEME	TERIOR NT		ction on rse side)	5. LEASE D		TION AND SER
	MPLETION					אָב ייָּ	g*	6, IF INDIA	N, ALLO	TTEE OR TRIBI
1a. TYPE OF WEL	WE		AS ELL	DRY _	OtherM	AY 0 2 200	16	7. UNIT AGE	REEMEN	T NAME
NEW WELL .	OVER	PEN P		ESVR.	Other	+AD+E	<b>OU</b>			se name, we
COG Operatin				,				9. API WELL	•	
3. ADDRESS AND 550 W. Texas,			79701		(432) 68	5-4372	. ,			5-34474 L, OR WILDCAT
4. LOCATION OF W			d in accordan	-	y State requireme					s Paddock
At surface At top prod. inte	val reported belo	w		330 FNL	& 430 FWL	•		11. SEC., T., OR ARI		R BLOCK AND
At total depth		•						Sec	. 20 T	17S R30E
			14. PERM	IT NO.	DA	TE ISSUED	·	12, COUNTY PARISH Edic	OR V	13. STATE
15. DATE SPUDDED 2/6/2006	16. DATE T.D. REACH 2/20/200		ATE COMPL. (Re 3/17/2		18. ELEV	ATIONS (DF, RI	(B, RT, GR,			EV. CASING HEAD
20. TOTAL DEPTH, MD 8	TVD 21. PLU	G, BACK T.D., M		22. IF MULTI HOW MA	PLE COMPL,	23. INTER DRILL	VALS ED BY	ROTARY TO	OLS	CABLE TOO
24. PRODUCING INTE	RVAL (S), OF THIS	COMPLETION	- ТОР, ВОТТО	M, NAME (I	MD AND TVD)*					WAS DIRECTION SURVEY MADE
<u></u>			082.5-618	1.5', .42,	128					Yes
26. TYPE ELECTRIC	NO OTHER LOGS I		Density, L	ateralog	, Spectral Ga	ımma Ra	у		27. W	NO NO
28.					port all strings sa					
CASING SIZE/GRADE	WEIGHT, LBJF	DEF	TH SET (MD)		E SIZE	TOP OF CEN		TING RECOR	P	AMOUNT PU
13 3/8, H-40 8 5/8, J-55	48		425 1047		7 1/2 2 1/4		449sx 525sx			None
5 1/2, J-55	17		6389	<del></del>	7/8		1505s		None None	
29.		LINER RECO	ORD			30.	TU	BING REC	ORD	
SIZE	TOP (MD)	воттом (м		EMENT	SCREEN (MD)	SIZE		DEPTH SET (	MD)	PACKER SET
				j·	·	2 7/8	3	6203		
					-comn l		1			
31. PERFORATION R	ECORD (Interval, s	ize and numb	"CEPTED	FORK	-32.0PD A	сір, ѕнот,				
31. PERFORATION R	ECORD (Interval, s	Ize and numb	CEPTED	FORK	DEPTH INTERV	AL (MD)		INT AND KIN	D OF M	ATERIAL USED
31. PERFORATION R	ECORD (Interval, s	ize and numb	Γ.		DEPTH INTERV	AL (MD)			D OF M	ATERIAL USED
	ECORD (Interval, s		8 APR	2 7 20	5082.5-61	AL (MD)		INT AND KIN	D OF M	ATERIAL USED
33. DATE FIRST PRODUCT	5082.5-6181	.5', .42, 12	APR  GAR  GAR  GAR  GAR  GAR  GAR  GAR	2 7 20 Y CAROD	DEPTH INTERV 5082.5-61	AL (MD)		INT AND KIN See 316	0-5 fo	r detail
33.	5082.5-6181	.5', .42, 12	APR  GAR  GAR  GAR  Flowing Gas h	2 7 20 Y GPROD III. plimping = s 1/2"x2"	5082.5-61	81:5'	AMOL	See 316	O-5 fo	ATERIAL USED r detail
33. DATE FIRST PRODUCT 3/20/20(	5082.5-6181	.5', .42, 12	APR  CAR  D (Flowing 1935)	2 7 20 Y GPROD III. plimping = s 1/2"x2"	5082.5-61	AL (MD)	AMOL	See 316  WELL ST shut-in	O-5 fo	r detail r detail roducing or Producing

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

35. LIST OF ATTACHMENTS

**Deviation Survey and Logs** 

Sold

118

275

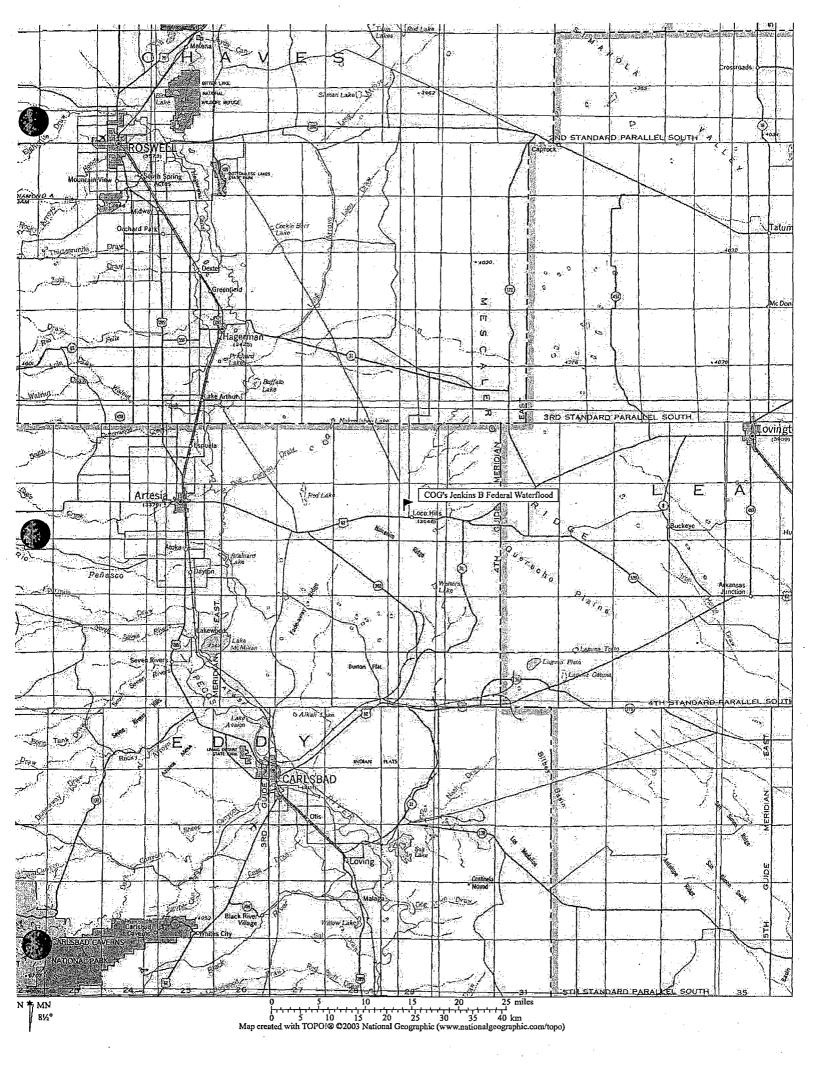
attached information is complete and correct as determined from all available records

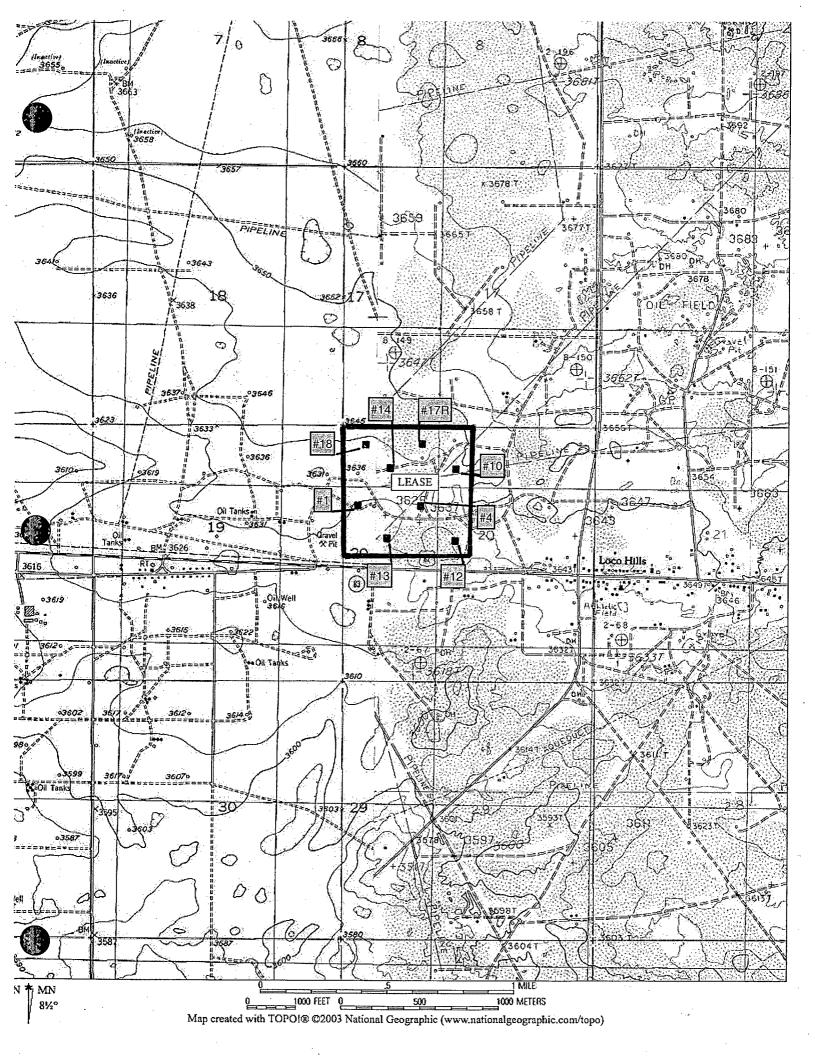
24-HOUR RATE

**Production Clerk** 4/24/2006

66

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.		TO	OP
oco Hills Paddock	5082	6181		NAME	MEAS.DEPTH	TRUE VERT.DEPT
JOO IIMIS T AUGUOCK	3002	0101		Yates	1100	,
				Seven Rivers	1394	
	•			Queen	2016	
				Grayburg	2400	₹ 2
9				San Andres	2738	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
BURENT (F. FIGE.)  CARCES FIGE.  MA APR 25 PM 1: 29	j			Glorietta	4166	j. i
9 H H	.d >			,		
BURENU (F. CARLEST) 2006 APR 2.5	)					
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VED ANIO: 36	(2. E			`		
	C					
PECEIVE 2006 APR 27 AM IL PRESSER SACIO			* .			
2005 A	i.	,			,	
						OCD WALES
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## DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT CASE RECORDATION**

(MASS) Serial Register Page

RunDate/Time: 08/15/06 04:58 PM 1 02-25-1920;041STAT0437;30USC226

**Total Acres** 

Serial Number NMLC-- 0 054988B

Page 10 of 23

ase Type 310781: O&G RENEWAL LEASE - PD

160.000

Commodity 459: OIL & GAS Case Disposition: AUTHORIZED

Serial Number: NMLC-- 0 054988B

Name & Address		$t = \epsilon$	Int 1	Rel % Interest
BROWN JAMES D JR	321 W GRAND	ARTESIA NM 88210	OPERATING RIGHTS	0.000000000
CHASE OIL CORP	PO BOX 1767	ARTESIA NM 882111767	OPERATING RIGHTS	0.000000000
CHASE RICHARD L	505 S BOLTON RD	ARTESIA NM 88210	OPERATING RIGHTS	0.000000000
CHASE ROBERT C	2306 SIERRA VISTA DR	ARTESIA NM 88210	OPERATING RIGHTS	0.000000000
COG OIL & GAS LP	550 W TEXAS #1300	MIDLAND TX 79701	LESSEE	100.000000000
COG OIL & GAS LP	550 W TEXAS #1300	MIDLAND TX 79701	OPERATING RIGHTS	0.000000000
CROUCH GERENE D C	PO BOX 693	ARTESIA NM 88211	OPERATING RIGHTS	0.000000000
ERICSON REBECCA S	2102 BRISCOE AVE	ARTESIA NM 88210	OPERATING RIGHTS	0.000000000
		· · · · · · · · · · · · · · · · · · ·	•	

Serial Number: NMLC-- 0 054988B

Mer Twp Rng Sec	STyp SNr	Suff Subdivision	District/Resource Area	County	Mgmt Agency
23 0170S 0300E 020	ALIQ	NW;	CARLSBAD FO	EDDY	BUREAU OF LAND MGMT

Serial Number: NMLC-- 0 054988B

			Serial Number: NMLC 0 054988B					
Act Date	Code	Action	Action Remarks Pending Office					
03/20/1936	387	CASE ESTABLISHED						
03/20/1936	496	FUND CODE	05;145003					
/20/1936	868	EFFECTIVE DATE						
6/15/1937	. 553	CASE CREATED BY ASGN	OUT OF NMLC029342-B;					
03/01/1956	237	LEASE ISSUED						
03/01/1956	242	LEASE RENEWED	THRU 02/28/66;					
03/01/1956	242	LEASE RENEWED	THRU 2/28/66;					
03/16/1962	817	MERGER RECOGNIZED	GRARIDGE CORP/IBEX CO					
03/16/1962	940	NAME CHANGE RECOGNIZED	IBEX CO/GRARIDGE CORP					
03/01/1966	237	LEASE ISSUED						
03/01/1966	242	LEASE RENEWED	THRU 02/28/76;					
03/01/1966	242	LEASE RENEWED	THRU 2/28/76;					
03/01/1976	237	LEASE ISSUED						
03/01/1976	242	LEASE RENEWED	THRU 02/28/86;					
03/01/1976	242	LEASE RENEWED	THRU 2/28/86;					
01/01/1978	246	LEASE COMMITTED TO CA	SRM-1302					
04/11/1984	140	ASGN FILED	PETRO CORP/DAMSON					
10/11/1984	963	CASE MICROFILMED	CNUM 103,829 AC					
11/10/1984	139	ASGN APPROVED	EFF 05/01/84;					
01/27/1986	314	RENEWAL APLN FILED						
03/01/1986	237	LEASE ISSUED						
03/01/1986	242	LEASE RENEWED	THRU 02/28/96;					
03/01/1986	534	RLTY RATE-SLIDING-SCH D						
07/25/1988	974	AUTOMATED RECORD VERIF	AGH/MIG					
12/22/1988	932	TRF OPER RGTS FILED						
01/24/1989	933	TRF OPER RGTS APPROVED	EFF 01/01/89;					
01/24/1989	974	AUTOMATED RECORD VERIF	TF/MT					
01/24/1989 07/1989 11/1989	932	TRF OPER RGTS FILED						
11/1989	933	TRF OPER RGTS APPROVED	EFF 05/01/89;					
05/11/1989	974	AUTOMATED RECORD VERIF	DGT/MT					

NO WARRANTY IS MADE BY BLM FOR USE OF THE DATA FOR PURPOSES NOT INTENDED BY BLM

## DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT CASE RECORDATION (MASS) Serial Register Page

Page 11 of 23 RunDate/Time: 08/15/06 04:58 PM 2/04/1991 140 ASGN FILED DAMSON/DAMSON ETAL /09/1991 139 ASGN APPROVED EFF 03/01/91; 04/09/1991 974 AUTOMATED RECORD VERIF GLC/CG 09/18/1991 140 ASCN FILED DAMSON/P&P ETAL 04/09/1992 140 ASGN FILED DAMSON/P&P ETAL 06/22/1992 ASGN APPROVED 139 EFF 05/01/92; 06/22/1992 974 AUTOMATED RECORD VERIF BTM/JS 08/06/1992 140 ASGN FILED PARKER/MARBOB ENY 10/01/1992 621 RLTY RED-STRIPPER WELL 1.3%;/1/ 12/07/1992 140 ASGN FILED MARBOB/CHASE OIL CORP ASGN FILED 12/31/1992 140 NATIONSBANK/MACK ENE 01/04/1993 567 ASGN RETURNED UNAPPROVED DAMSON/P&P ETAL 01/04/1993 974 AUTOMATED RECORD VERTE ST/JS 01/05/1993 932 TRF OPER RGTS FILED MACK ENE/D CHASE 01/05/1993 MACK ENE/R C CHASE 932 TRF OPER RGTS FILED 01/05/1993 932 TRF OPER RGTS FILED MACK ENE/R L CHASE 01/19/1993 139 ASGN APPROVED EFF 10/01/91; 01/19/1993 974 AUTOMATED RECORD VERIF ST/JS 02/10/1993 625 RLTY REDUCTION APPV /1/ 02/11/1993 933 TRF OPER RGTS APPROVED (1) EFF 02/01/93; 02/11/1993 933 TRF OPER RGTS APPROVED (2) EFF 02/01/93; 02/11/1993 933 TRF OPER RGTS APPROVED (3) EFF 02/01/93; 02/11/1993 974 AUTOMATED RECORD VERTE SSP/JS 04/01/1993 139 ASGN APPROVED EFF 01/01/93; 04/01/1993 ASGN APPROVED 139 EFF 09/01/92; 04/01/1993 974 AUTOMATED RECORD VERIF CM/KRP 07/1993 909 BOND ACCEPTED EFF 04/05/93;NM2151 /16/1993 575 APD FILED MACK ENERGY CORP 06/01/1993 974 AUTOMATED RECORD VERIF JLV 06/17/1993 576 APD APPROVED #7 JENKINS B FED 07/22/1993 139 ASGN APPROVED EFF 01/01/93: 07/22/1993 933 TRE OPER RGTS APPROVED MACK ENE/R C CHASE 07/22/1993 974 AUTOMATED RECORD VERIF TF/JCV 08/31/1993 AUTOMATED RECORD VERIF GAG 11/08/1993 140 ASGN FILED TURNCO/CHASE OIL 11/15/1993 140 ASGN FILED EST J F WEST/CHASE 11/15/1993 140 ASGN FILED J H WEST/CHASE OIL 11/15/1993 140 ASGN FILED MACK ENE/CHASE OIL 12/30/1993 932 TRF OPER RGTS FILED CHASE/R C CHASE ETAL 01/21/1994 139 ASGN APPROVED (1) EFF 12/01/93; 01/21/1994 ASGN APPROVED 139 (2) EFF 12/01/93; 01/21/1994 139 ASGN APPROVED (3) EFF 12/01/93; 01/21/1994 139 ASGN APPROVED (4) EFF 12/01/93; 01/21/1994 974 AUTOMATED RECORD VERIF DGT/DGT 01/27/1994 AUTOMATED RECORD VERIF 974 VHG 05/12/1994 933 TRF OPER RGTS APPROVED EFF 04/01/94; AUTOMATED RECORD VERIF 05/12/1994 974 VHG 03/01/1996 242 LEASE RENEWED THRU 02/28/16; 03/01/1996 530 RLTY RATE - 12 1/2% /A/ 03/01/1996 EFFECTIVE DATE 868 LAST RENEWAL; 06/21/1996 932 TRF OPER RGTS FILED HOME-STAKE ETAL/CHASE 2/27/1996 933 TRF OPER RGTS APPROVED EFF 07/01/96; 27/1996 974 AUTOMATED RECORD VERIF MV/MV

> NO WARRANTY IS MADE BY BLM FOR USE OF THE DATA FOR PURPOSES NOT INTENDED BY BLM

HOME-STAKE ETAL/CHASE

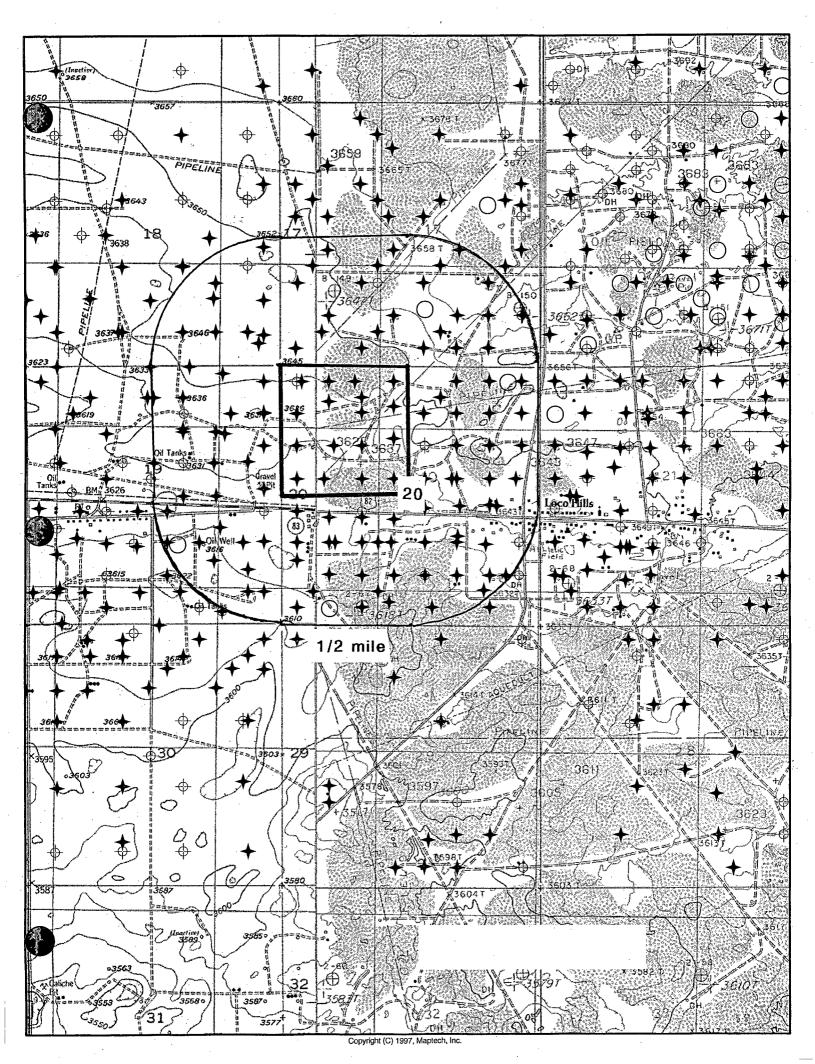
0/01/1996

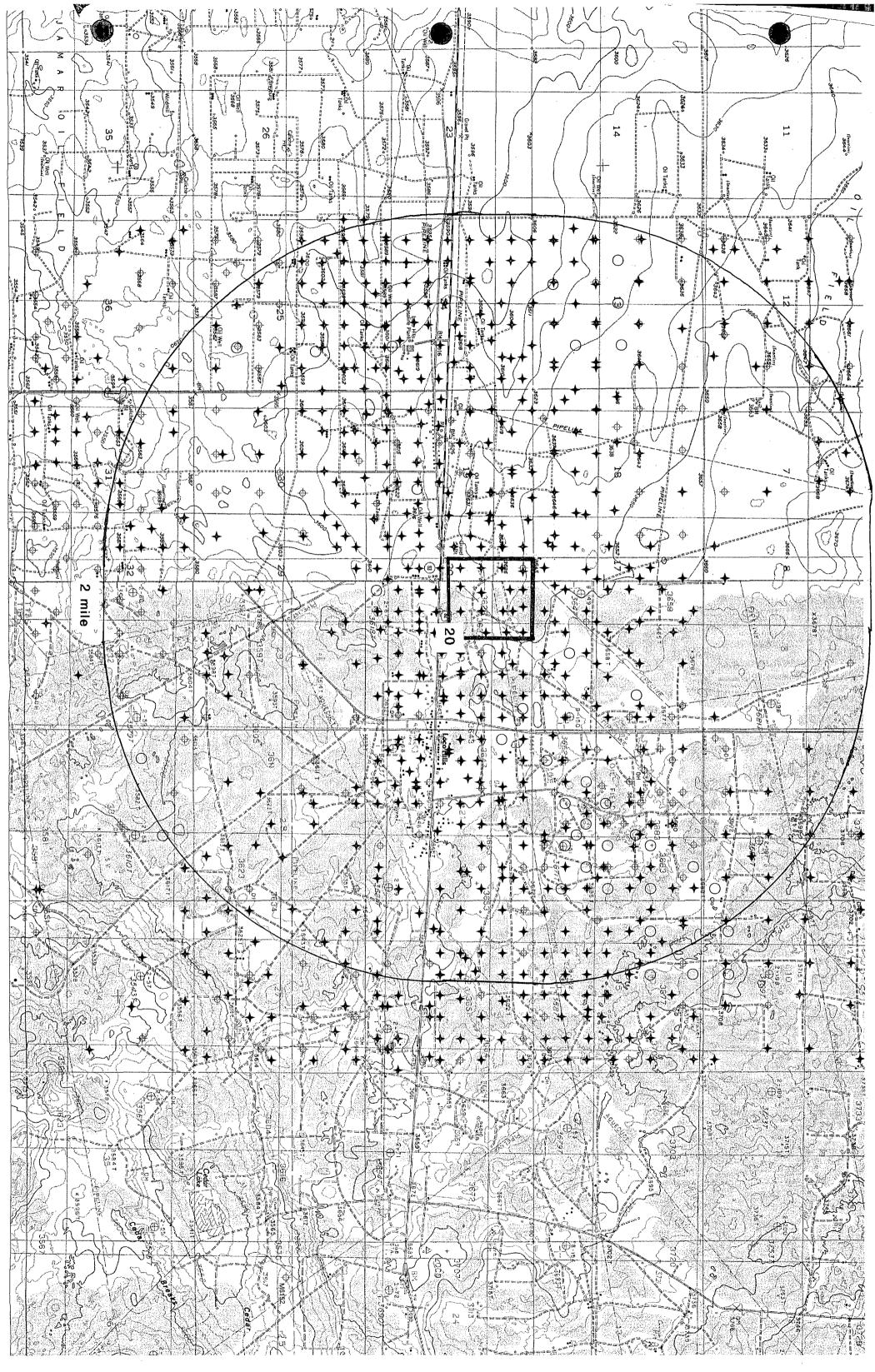
140

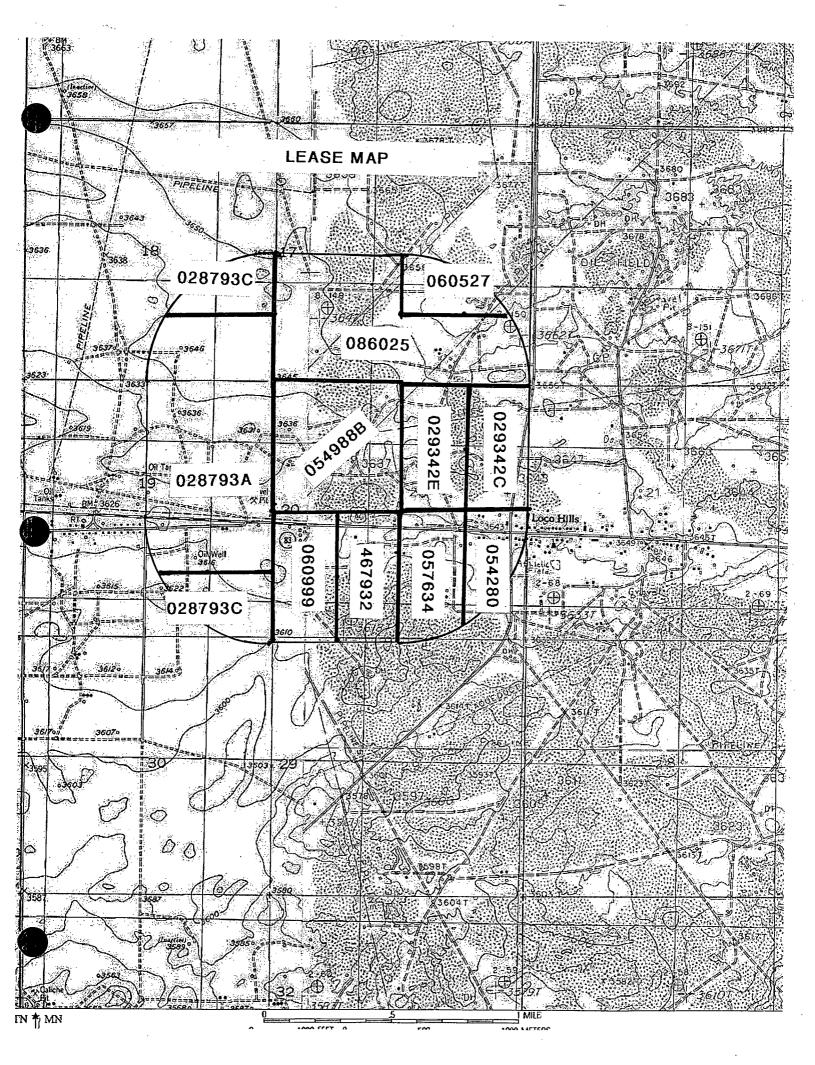
ASGN FILED

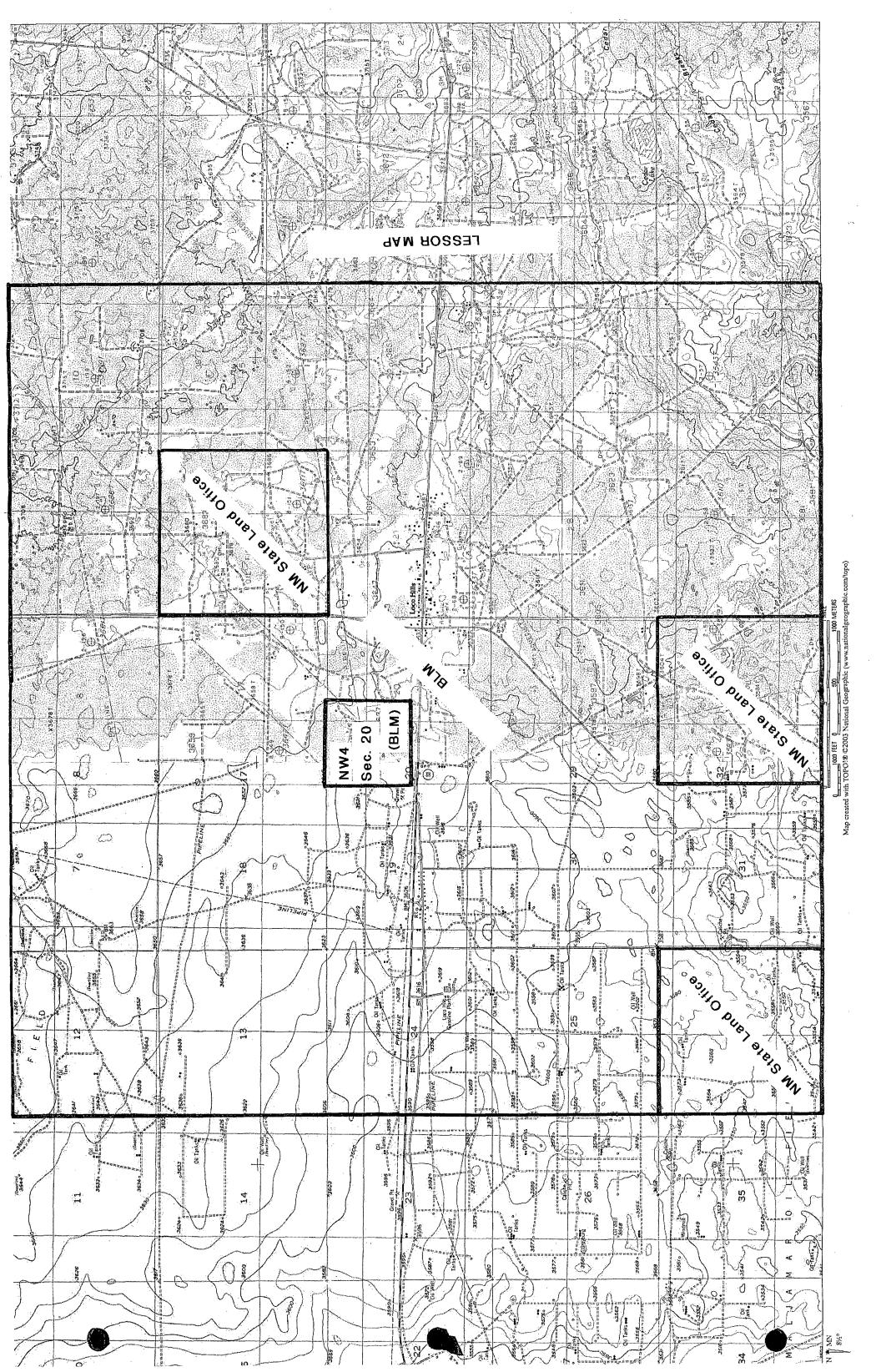
## DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT CASE RECORDATION (MASS) Serial Register Page

RunDate/Time	e: 08/1	15/06 04:58 PM	(			Page 12 of 23
/03/1996	314	RENEWAL APLN FILED				
1/25/1996	139	ASGN APPROVED		EFF 11/01/96;		
11/25/1996	974	AUTOMATED RECORD VERIF		ANN	4	
12/03/1996	237	LEASE ISSUED			•	
12/03/1996	974	AUTOMATED RECORD VERIF	•	AR		
01/23/1997	575	APD FILED		•	,	
01/29/1997	575	APD FILED				
02/13/1997	576	APD APPROVED		#8 JENKINS B FED		
03/06/1997	576	APD APPROVED		7 JENKINS B FED		
06/27/1997	575	APD FILED	•	•	**	
07/25/1997	576	APD APPROVED		#9 JENKINS B FED		j.
05/10/2006	140	ASGN FILED		CHASE OIL/COG OIL &;1		-
06/26/2006	932	TRF OPER RGTS FILED		CHASE OIL/COG OIL &;1		
07/25/2006	139	ASGN APPROVED		EFF 06/01/06;		
07/25/2006	974	AUTOMATED RECORD VERIF		ANN		
07/28/2006	933	TRF OPER RGTS APPROVED	1	EFF 07/01/06;		
07/28/2006	974	AUTOMATED RECORD VERIF		MV		
02/28/2016	763	EXPIRES			•	
Line Nr	Remar	ks		Serial Number:	: NMLC 0 0549	988B
0002	BONDE	O OPERATOR(S):				
0003	09/27/	/1996 - MACK ÉNERGY CORP	NM2151 SW/NM			:
0004	/A/AC	534 RLTY RATE SLIDING SO	CH D EFF 3/20/1	936 THRU		
0005	2/28/1	996. AC530 RLTY RATE 12.	.5% EFF 3/1/96	THRU		
2006	THE PF	RESENT.				





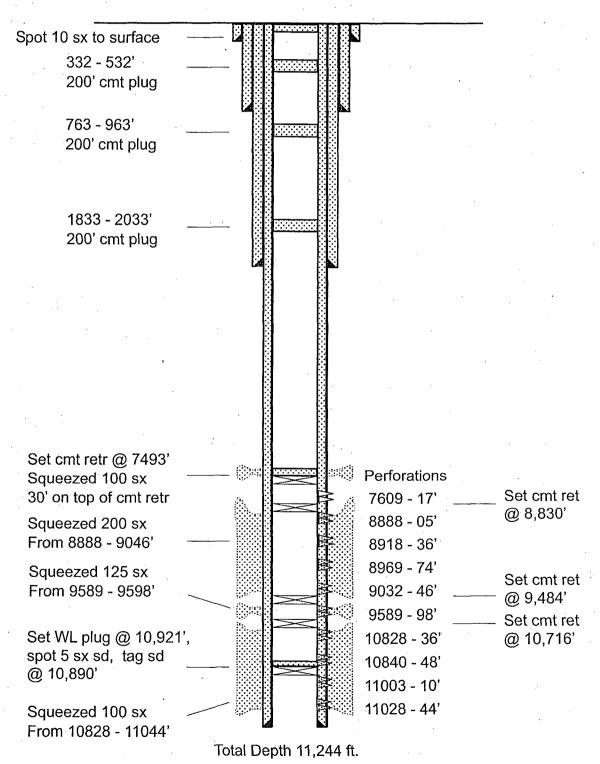




## PLUGGED WELLBORE DIAGRAM

MC INTYRE FED 008 API # 30-0-15-23265 1650' FSL & 1980' FWL SECTION 17-T17S-R30E EDDY COUNTY, NM STATUS: P&A ON 11/15/80

CA	ASING	Depth Set	Hole Size	Cement
	30"	38'	36"	Redi-mix to Surf
13-3/8"	54.5# K-55	446'	17-1/2"	425 sx to Surf
8-5/8"	32# S-80	2,652'	11"	1250 sx to Surf
5-1/2"	17# L-80	11,242'	7-7/8"	2035 sx to Surf



DATE 12/02/80

SIGNED .

			STATES		(See other	Budg	et Bureau No. 42-R355,5.
•	DEPAR'	TMENT C	OF THE IN	TERIOR	structions reverse si	on	NATION AND SERIAL NO.
		GEOLOGIC	CAL SURVEY	<i>(</i>	reverse si	NM -0749	
			<del> </del>				LOTTEE OR TRIBE NAME
WELL CO	MPLETION	OR RECC	MPLETION	REPORT A	AND LOG*		
1a. TYPE OF WEL	L: 011.		DRY X	Other	RECE!\	7. UNIT AGREEM	ENT NAME
b. TYPE OF COM	WE PLETION.	TL C WELL	רו אנוללו	Other			,
NEW [	WORK DE	EP- PLUG	DIFF. DESVR.	P 8	ADEC 161	1980 <sup>S. FARM OR LEAD</sup>	OF NAMES
WELL L	OVER L. LEN			Other	U-6 1 5	980° ''''' or ""	op name
2. NAME OF OPERAT	AKCO OI	1 & Gas Co		<b>/</b> .		McIntyre 9, WELL NO.	Federal
		ic Richfie	1d Company		<u>0, C, D</u>	9. WELL NO.	
3. ADDRESS OF OPE			Ā		ARIESIA, OFF	ICE 8	
P. O. Bo	х 1710, Но	bbs, New M	lexico 88240			-A South	OOL, OB WILDCAT
4. LOCATION OF WE	LL (Report locati	on clearly and in	accordance with at		ments)* b		ls Morrow Gas
At surface 1	650' FSL &	1980' FWL		DEC 5	1980	11. SEC., T., R., M OR AREA	I., OH BLOCK AND SURVEY
At top prod. int	erval reported be	elow As Abov	e		- 40		
		As Abov	e U.S	RESIA NEW	L Stimer	17-17S-30	)E
At total depth					MEYION		
• •			14. PERMIT NO		VIA-VETTED	12. COUNTY OR PARISH	13. STATE
		· · · · · · · · · · · · · · · · · · ·		<u> </u>		Eddy	N M
15. DATE SPUDDED	i	ı	TE COMPL. (Ready t	o prod.) 18. 1	ELEVATIONS (DF, RE	,, 0, 5,	). ELEV. CASINGHEAD
7/29/80	9/11/8		Dry		3660.1' (	GR	··· · · · · · · · · · · · · · · · · ·
20. TOTAL DEPTH, MD	& TVD 21. PLU	O, BACK T.D., MD	22. IF MUL HOW M	TIPLE COMPL.,	23. INTERVAL	2.▼	CABLE TOOLS
11,244'	P	& A .			>	0-11,244	
24. PRODUCING INTER	WAL(S), OF THIS	COMPLETION-TO	P, BOTTOM, NAME (	MD AND TVD)*	,		25. WAS DIRECTIONAL SURVEY MADE
. None		*					
				·			No
26. TYPE ELECTRIC A					,	27.	WAS WELL CORED
GR-DLL, GR	-FDC-CNL w	/Caliper,	GR Sonic log	g, CBL & C	Corr log.		No
28.			SING RECORD (Res	ort, all strings s	et in well)		
CASINO SIZE	WEIGHT, LB.	FT. DEPTH S		LE SIZE	CEMENTI	NO RECORD : 75	AMOUNT PELLED
30"			381	36"			AMOUNT PELLED
30" 13-3/8" OD	54.5# K-	55	38' 446'	36"	CEMENTI	surf	AMOUNT PELLED
30" 13-3/8" OD 8-5/8" OD	54.5# K-	55	38' 446' 2652'	36" 17½" 11"	Redi-Mix to	surf to surf	AMOUNT PELLED
30" 13-3/8" OD	54.5# K-	55 0	38' 446' 2652'	36" 17½" 11"	Redi-Mix to 425 sx Circ 1250 sx Cir	surf to surf	AMOUNT PELLED
30" 13-3/8" OD 8-5/8" OD	54.5# K- 32# S-8 17# L-8	55 0	38' 446' 2652' ,242'	36" 17½" 11"	Redi-Mix to 425 sx Circ 1250 sx Cir	surf to surf c to surf	AMOUNT PELLED
30" 13-3/8" OD 8-5/8" OD 5½" OD	54.5# K- 32# S-8 17# L-8	55 0 0 11	38' 446' 2652' ,242'	36" 17½" 11"	CEMENTI Redi-Mix to 425 sx Circ 1250 sx Cir 2035 sx Cir 30.	surf to surf to to surf to to surf	AMOUNT PELLED
30" 13-3/8" OD 8-5/8" OD 5½" OD 29.	54.5# K- 32# S-8 17# L-8	55 0 0 11 LINER RECORD	38' 446' 2652' ,242'	36" 36" 17½" 11" 7-7/8"	CEMENTI Redi-Mix to 425 sx Circ 1250 sx Cir 2035 sx Cir 30.	o surf to surf to to surf to to surf TUBING RECORD	PT X 10
30" 13-3/8" OD 8-5/8" OD 5½" OD 29.	54.5# K- 32# S-8 17# L-8	55 0 0 11 LINER RECORI	38' 446' 2652' ,242'	36" 36" 17½" 11" 7-7/8"	CEMENTI Redi-Mix to 425 sx Circ 1250 sx Cir 2035 sx Cir 30.	o surf to surf to to surf to to surf TUBING RECORD	PACKER SET (MD)
30" 13-3/8" OD 8-5/8" OD 5½" OD 29.  SIZE	54.5# K- 32# S-80 17# L-80 TOP (MD)	55 0 0 11 LINER RECORD BOTTOM (MD) ze and number)	38' 446' 2652' ,242'  SACKS CEMENT*	17½" 11" 7-7/8"    screen (MD)	Redi-Mix to 425 sx Circ 1250 sx Circ 2035 sx Cir 30. size	o surf to surf to to surf to to surf TUBING RECORD	PACKER SET (MD)
30" 13-3/8" OD 8-5/8" OD 5½" OD 29.  SIZE  31. PERFORATION REC 11,003-11,01	54.5# K- 32# S-80 17# L-80 TOP (MD) ORD (Interval, sil. 10 & 11028-	55 0 11 LINER RECORD BOTTOM (MD) ze and number) -11044' =46	38' 446' 2652' ,242'  SACKS CEMENT*  5.50" holes	17½" 11" 7-7/8"    screen (MD)	Redi-Mix to 425 sx Circ 1250 sx Cir 2035 sx Cir 30. size	o surf to surf to to surf to to surf TUBING RECORD DEPTH SET (MD)	PACKER SET (MD)
30" 13-3/8" OD 8-5/8" OD 5½" OD 29.  SIZE 11,003-11,01 10,828-10,83	54.5# K- 32# S-80 17# L-80 TOP (MD) ORD (Interval, sil. 0 & 11028- 36 & 10840-	55 0 11 LINER RECORD BOTTOM (MD) 2e and number) -11044' = 46 -10848' = 32	38' 446' 2652' ,242'  SACKS CEMENT*  5.50" holes	17½" 11" 7-7/8"    screen (MD)	CEMENTI Redi-Mix to 425 sx Circ 1250 sx Cir 2035 sx Cir 30. size  ACID, SHOT, FRA	o surf to surf to to surf to to surf TUBING RECORD DEPTH SET (MD) ACTURE, CEMENT SQ	PACKER SET (MD)  UEEZE, ETC.  MATERIAL USED
30" 13-3/8" OD 8-5/8" OD 5½" OD 29.  SIZE 11,003-11,01 10,828-10,83 9589-9598' = 9032-9046' =	54.5# K- 32# S-8 17# L-8  TOP (MD)  ORD (Interval, si 0 & 11028- 36 & 10840- 10 .44" H 29 .44" H	55 0	38' 446' 2652' ,242'  SACKS CEMENT*  5.50" holes	17½" 11" 7-7/8"    SCREEN (MD)    32.   DEPTH INTER	CEMENTI Redi-Mix to 425 sx Circ 1250 sx Cir 2035 sx Cir 30. size  ACID, SHOT, FRA RVAL (MD) 1,010' 3000	o surf to surf to to surf to to surf TUBING RECORD DEPTH SET (MD)  ACTURE, CEMENT SQ AMOUNT AND KIND OF	PACKER SET (MD)
30" 13-3/8" OD 8-5/8" OD 5½" OD 29.  31. PERMORATION REC 11,003-11,01 10,828-10,83 9589-9598' = 9032-9046' = 8969-8974' =	54.5# K- 32# S-8 17# L-8  TOP (MD)  ORD (Interval, 81- 0 & 11028- 6 & 10840- 10 .44" H 29 .44" H 11 .25" H	55 0 0 11 LINER RECORD BOTTOM (MD)  ze and number) -11044' = 46 -10848' = 32 noles noles noles	38' 446' 2652' ,242'  SACKS CEMENT*  5.50" holes 2.44" holes	17½" 11" 7-7/8"  SCREEN (MD)  32.  DEPTH INTER 11,003-1	CEMENTI Redi-Mix to 425 sx Circ 1250 sx Cir 2035 sx Cir 30. size  ACID, SHOT, FRA RVAL (MD) 1,010	o surf to surf to to surf to to surf TUBING RECORD DEPTH SET (MD)  CTURE, CEMENT SQ AMOUNT AND KIND OF 0 gals 5% aci s 3% KCL wtr	PACKER SET (MD)  DUEEZE, ETC.  MATERIAL USED  d, flushed w/45
30" 13-3/8" OD 8-5/8" OD 5½" OD 29.  SIZE 11,003-11,01 10,828-10,83 9589-9598' = 9032-9046' =	54.5# K- 32# S-8 17# L-8  TOP (MD)  ORD (Interval, 81- 0 & 11028- 6 & 10840- 10 .44" H 29 .44" H 11 .25" H	55 0 0 11 LINER RECORD BOTTOM (MD)  ze and number) -11044' = 46 -10848' = 32 noles noles noles	38' 446' 2652' ,242'  SACKS CEMENT*  5.50" holes 2.44" holes	17½" 11" 7-7/8"  SCREEN (MD)  32.  DEPTH INTER 11,003-1	CEMENTI Redi-Mix to 425 sx Circ 1250 sx Cir 2035 sx Cir 30. size  ACID, SHOT, FRA RVAL (MD) 1,010' 3000 1,044' bb1:	o surf to surf to to surf to to surf TUBING RECORD DEPTH SET (MD)  CTURE, CEMENT SQ AMOUNT AND KIND OF 0 gals 5% aci s 3% KCL wtr	PACKER SET (MD)  DUEEZE, ETC.  MATERIAL USED  d, flushed w/45  & 900 SCF N2/bb1  tan-2 gel 40 w/
30" 13-3/8" OD 8-5/8" OD 5½" OD 29.  31. PERMORATION REC 11,003-11,01 10,828-10,83 9589-9598' = 9032-9046' = 8969-8974' =	TOP (MD)  ORD (Interval, si. 0 & 11028-36 & 10840-10.44" H = 11.25" H	55 0	38' 446' 2652' ,242'  SACKS CEMENT*  6 .50" holes 2 .44" holes  holes	17½"   11"   7-7/8"	CEMENTI Redi-Mix to 425 sx Circ 1250 sx Circ 2035 sx Cir 30. size  ACID. SHOT. FRA RVAL (MD) 1,010' 3000 1,044' bb1: 4 2 (co	to surf to to surf to to surf to to surf to to surf tubing record pepth set (MD)  CTURE CEMENT SQ AMOUNT AND KIND OF 0 gals 5% aci s 3% KCL wtr 7,720 gals Ti	PACKER SET (MD)  DUEEZE, ETC.  MATERIAL USED  d, flushed w/45  & 900 SCF N2/bb1  tan-2 gel 40 w/
30" 13-3/8" OD 8-5/8" OD 5½" OD 29.  31. PERMORATION REC 11,003-11,01 10,828-10,83 9589-9598' = 9032-9046' = 8969-8974' =	TOP (MD)  ORD (Interval, si. 0 & 11028-36 & 10840-10.44" H = 11.25" H	55 0	38' 446' 2652' ,242'  SACKS CEMENT*  5 .50" holes 2 .44" holes	17½"   11"   7-7/8"	CEMENTI Redi-Mix to 425 sx Circ 1250 sx Circ 2035 sx Cir 30. size  ACID. SHOT. FRA RVAL (MD) 1,010' 3000 1,044' bb1: 4 2 (co	to surf to to surf to to surf to to surf to to surf tubing record DEPTH SET (MD)  CTURE CEMENT SQ AMOUNT AND KIND OF O gals 5% aci s 3% KCL wtr 7,720 gals Ti ont'd on atta	PACKER SET (MD)  DUEZE, ETC.  MATERIAL USED  d, flushed w/45 & 900 SCF N2/bb1 tan-2 gel 40 w/ ched sheet)  DUEZE, ETC.  MATERIAL USED  d, flushed w/45  EVEN (Producing or
30"  13-3/8" OD  8-5/8" OD  5½" OD  29.  31. PERFORATION REC 11,003-11,01 10,828-10,83 9589-9598' = 9032-9046' = 8888-8905 & 7609-7617' = 33.*  DATE FIRST PRODUCTS none	TOP (MD)  ORD (Interval, si. 0. & 11028-36 & 10840-10. 44"   F = 29 .44"   F = 11 .25"   R = 11 .25"   R = 17 .50"   F = 10 .44"   F = 11 .25"   R = 10 .44"   F = 11 .25"   F = 10 .44"   F = 10 .44"	55 0 0 11 LINER RECORD BOTTOM (MD)  ze and number) -11044' = 46 -10848' = 32 noles noles noles toles toles cortion method (	38' 446' 2652' ,242'  SACKS CEMENT*  5.50" holes 2.44" holes PROI	17½"   11"   7-7/8"	CEMENTI Redi-Mix to 425 sx Circ 1250 sx Circ 2035 sx Cir 30. size  ACID. SHOT. FRA RVAL (MD) 1,010' 3000 1,044' bb1: 4 2 (co	o surf to surf to to surf to to surf to to surf TUBING RECORD DEPTH SET (MD)  ACTURE CEMENT SQ AMOUNT AND KIND OF O gals 5% aci s 3% KCL wtr 7,720 gals Ti ont'd on atta	PACKER SET (MD)  DUEZE, ETC.  MATERIAL USED  d, flushed w/45 & 900 SCF N2/bb1 tan-2 gel 40 w/ ched sheet)  DUEZE, ETC.  MATERIAL USED  d, flushed w/45  EVEN (Producing or
30"  13-3/8" OD  8-5/8" OD  5½" OD  29.  SIZE  11,003-11,01 10,828-10,83 9589-9598' = 9032-9046' = 8888-8905 & 7609-7617' = 33.*  DATE FIRST PRODUCTS	TOP (MD)  ORD (Interval, 81- 0 & 11028- 10 .44"   1	55 0 0 11 LINER RECORD BOTTOM (MD)  ze and number) -11044' = 46 -10848' = 32 noles noles noles 1 = 37 .26' noles	38' 446' 2652' ,242'  SACKS CEMENT*  5.50" holes 2.44" holes PROI	36" 17½" 11" 7-7/8"    SCREEN (MD)   32.   DEPTH INTER   11,003-1   11,028-1   DUCTION   DUCTION   Dumping—size an	CEMENTI Redi-Mix to 425 sx Circ 1250 sx Circ 2035 sx Cir 30. size  ACID. SHOT. FRA RVAL (MD) 1,010' 3000 1,044' bb1: 4 2 (co	o surf to surf to to surf to to surf to to surf TUBING RECORD DEPTH SET (MD)  ACTURE CEMENT SQ AMOUNT AND KIND OF O gals 5% aci s 3% KCL wtr 7,720 gals Ti ont'd on atta	PACKER SET (MD)  DUEEZE, ETC.  MATERIAL USED  d, flushed w/45 & 900 SCF N2/bb1  tan-2 gel 40 w/ ched sheet)  FUS (Producing or
30"  13-3/8" OD  8-5/8" OD  5½" OD  29.  31. PERFORATION REC 11,003-11,01 10,828-10,83 9589-9598' = 9032-9046' = 8888-8905 & 7609-7617' = 33.*  DATE FIRST PRODUCTS none	TOP (MD)  ORD (Interval, si. 0. & 11028-36 & 10840-10. 44"   F = 29 .44"   F = 11 .25"   R = 11 .25"   R = 17 .50"   F = 10 .44"   F = 11 .25"   R = 10 .44"   F = 11 .25"   F = 10 .44"   F = 10 .44"	55 0 0 11 LINER RECORD BOTTOM (MD)  ze and number) -11044' = 46 -10848' = 32 noles noles noles toles toles cortion method (	38' 446' 2652' ,242'  SACKS CEMENT*  5 .50" holes 2 .44" holes PROI Flowing, gas lift, pr	32.   DEPTH INTER   11,003-1   11,028-1   11,000   11,0	CEMENTI Redi-Mix to 425 sx Circ 1250 sx Cir 2035 sx Cir 30. size  ACID, SHOT, FRA RVAL (MD) 1,010' 3000 1,044' bb1: 2 (co	o surf to to surf to to surf to to surf TUBING RECORD DEPTH SET (MD)  ACTURE CEMENT SQ AMOUNT AND KIND OF O gals 5% aci s 3% KCL wtr 7,720 gals Ti ont'd on atta	PACKER SET (MD)  DUEEZE, ETC.  MATERIAL USED  d, flushed w/45 & 900 SCF N2/bb1 tan-2 gel 40 w/ ched sheet)  DUEEZE, ETC.  MATERIAL USED  d, flushed w/45  E 900 SCF N2/bb1  Tus (Producing or P&A  GAS-OIL RATIO
30"  13-3/8" OD  8-5/8" OD  5½" OD  29.  31. PERFORATION REC 11,003-11,01 10,828-10,83 9589-9598' = 9032-9046' = 8888-8905 & 7609-7617' = 33.*  DATE FIRST PRODUCTS none	TOP (MD)  ORD (Interval, si. 0. & 11028-36 & 10840-10. 44"   F = 29 .44"   F = 11 .25"   R = 11 .25"   R = 17 .50"   F = 10 .44"   F = 11 .25"   R = 10 .44"   F = 11 .25"   F = 10 .44"   F = 10 .44"	55 0 0 11 LINER RECORD BOTTOM (MD)  ze and number) -11044' = 46 -10848' = 32 noles noles noles toles CTION METHOD (  Ory Hole    CHOKE SIZE	38' 446' 2652' ,242'  SACKS CEMENT'  5.50" holes 2.44" holes PROI Flowing, gas lift, pro  PROP'N. FOR TEST PERIOD OIL—BBL.	36" 17½" 11" 7-7/8"    SCREEN (MD)   32.   DEPTH INTER   11,003-1   11,028-1   DUCTION   DUCTION   Dumping—size an	CEMENTI Redi-Mix to 425 sx Circ 1250 sx Circ 2035 sx Circ 30.  SIZE  ACID. SHOT. FRA RVAL (MD) 1,010' 3000 1,044' bb1 & 2 (cold type of pump)  GAS-MCF.	o surf to surf to to surf to to surf to to surf TUBING RECORD DEPTH SET (MD)  ACTURE CEMENT SQ AMOUNT AND KIND OF O gals 5% aci s 3% KCL wtr 7,720 gals Ti ont'd on atta	PACKER SET (MD)  DUEEZE, ETC.  MATERIAL USED  d, flushed w/45  & 900 SCF N2/bb1  tan-2 gel 40 w/ ched sheet)  FUS (Producing or  P&A  GAS-OIL RATIO  GRAVITY-AFT (CORR.)
30"  13-3/8" OD  8-5/8" OD  5½" OD  29.  31. PERWORATION REC 11,003-11,01 10,828-10,83 9589-9598' = 9032-9046' = 8969-8974' = 8888-8905 & 8888-8905 & 33.*  DATE FIRST PRODUCTION DATE OF TEST	54.5# K- 32# S-8 17# L-8  TOP (MD)  ORD (Interval, si 0 & 11028- 6 & 10840- 10 .44" H 29 .44" H 11 .25" H 8918-8936' 17 .50" H HOURS TESTED	55 0 0 11 LINER RECORD BOTTOM (MD)  ze and number) -11044' = 46 -10848' = 32 holes holes toles	38' 446' 2652' ,242'  SACKS CEMENT'  5.50" holes 2.44" holes PROI Flowing, gas lift, pro  PROP'N. FOR TEST PERIOD OIL—BBL.	36" 17½" 11" 7-7/8"    SCREEN (MD)   32.   DEPTH INTER   11,003-1   11,028-1	CEMENTI Redi-Mix to 425 sx Circ 1250 sx Circ 2035 sx Circ 30.  SIZE  ACID. SHOT. FRA RVAL (MD) 1,010' 3000 1,044' bb1 & 2 (cold type of pump)  GAS-MCF.	o surf to to surf to to surf to to surf TUBING RECORD DEPTH SET (MD)  ACTURE CEMENT SQ AMOUNT AND KIND OF O gals 5% aci s 3% KCL wtr 7,720 gals Ti ont'd on atta	PACKER SET (MD)  DUEEZE, ETC.  MATERIAL USED  d, flushed w/45  & 900 SCF N2/bb1  tan-2 gel 40 w/ ched sheet)  FUS (Producing or  P&A  GAS-OIL RATIO  GRAVITY-AFT (CORR.)
30"  13-3/8" OD  8-5/8" OD  5½" OD  29.  31. PERWORATION REC 11,003-11,01 10,828-10,83 9589-9598' = 9032-9046' = 8969-8974' = 8888-8905 & 8888-8905 & 33.*  DATE FIRST PRODUCTION DATE OF TEST	54.5# K- 32# S-8 17# L-8  TOP (MD)  ORD (Interval, 81 0 & 11028- 86 & 10840- 10 .44" H 29 .44" H 11 .25" H 8918-8936 H 17 .50" H ON PRODU HOURS TESTED	Dry Hole    CALCULATED   CALCUL	38' 446' 2652' ,242'  SACKS CEMENT*  5.50" holes 2.44" holes PROI Flowing, gas lift, pi  PROD'N. FOR TEST PERIOD OIL—BBL.  OIL—BBL.	36" 17½" 11" 7-7/8"    SCREEN (MD)   32.   DEPTH INTER   11,003-1   11,028-1	CEMENTI Redi-Mix to 425 sx Circ 1250 sx Circ 2035 sx Circ 30.  SIZE  ACID. SHOT. FRA RVAL (MD) 1,010' 3000 1,044' bb1 & 2 (cold type of pump)  GAS-MCF.	o surf to surf to to surf to to surf to to surf TUBING RECORD DEPTH SET (MD)  ACTURE CEMENT SQ AMOUNT AND KIND OF O gals 5% aci s 3% KCL wtr 7,720 gals Ti ont'd on atta	PACKER SET (MD)  DUEEZE, ETC.  MATERIAL USED  d, flushed w/45  & 900 SCF N2/bb1  tan-2 gel 40 w/ ched sheet)  FUS (Producing or  P&A  GAS-OIL RATIO  GRAVITY-AFT (CORR.)
30"  13-3/8" OD  8-5/8" OD  512" OD  29.  31. PERFORATION REC 11,003-11,01 10,828-10,83 9589-9598' = 9032-9046' = 8969-8974' = 8969-8974' = 8969-8974' = 87609-7617' = 33.** DATE FIRST PRODUCTS none DATE OF TEST	54.5# K- 32# S-8 17# L-8  TOP (MD)  ORD (Interval, 81 0 & 11028- 86 & 10840- 10 .44" H 29 .44" H 11 .25" H 8918-8936 H 17 .50" H ON PRODU HOURS TESTED	Dry Hole    CALCULATED   CALCUL	38' 446' 2652' ,242'  SACKS CEMENT*  5.50" holes 2.44" holes PROI Flowing, gas lift, pi  PROD'N. FOR TEST PERIOD OIL—BBL.  OIL—BBL.	36" 17½" 11" 7-7/8"    SCREEN (MD)   32.   DEPTH INTER   11,003-1   11,028-1	CEMENTI Redi-Mix to 425 sx Circ 1250 sx Circ 2035 sx Circ 30.  SIZE  ACID. SHOT. FRA RVAL (MD) 1,010' 3000 1,044' bb1 & 2 (cold type of pump)  GAS-MCF.	CTURE, CEMENT SQ AMOUNT AND KIND OF O gals 5% aci S 3% KCL wtr 7,720 gals Ti ont'd on atta	PACKER SET (MD)  DUEEZE, ETC.  MATERIAL USED  d, flushed w/45  & 900 SCF N2/bb1  tan-2 gel 40 w/ ched sheet)  FUS (Producing or  P&A  GAS-OIL RATIO  GRAVITY-AFT (CORR.)
30"  13-3/8" OD  8-5/8" OD  512" OD  29.  31. PERFORATION REC 11,003-11,01 10,828-10,83 9589-9598' = 9032-9046' = 8969-8974' = 8969-8974' = 8969-8974' = 87609-7617' = 33.** DATE FIRST PRODUCTS none DATE OF TEST	54.5# K- 32# S-8 17# L-8  TOP (MD)  ORD (Interval, 81 0 & 11028- 36 & 10840- = 10 .44" F = 29 .44" F = 11 .25" F 8918-8936' - 17 .50" F  HOURS TESTED  CASING PRESSUR	Dry Hole    CALCULATED   CALCUL	38' 446' 2652' ,242'  SACKS CEMENT*  5.50" holes 2.44" holes PROI Flowing, gas lift, pi  PROD'N. FOR TEST PERIOD OIL—BBL.  OIL—BBL.	36" 17½" 11" 7-7/8"    SCREEN (MD)   32.   DEPTH INTER   11,003-1   11,028-1	CEMENTI Redi-Mix to 425 sx Circ 1250 sx Circ 2035 sx Circ 30.  SIZE  ACID. SHOT. FRA RVAL (MD) 1,010' 3000 1,044' bb1 & 2 (cold type of pump)  GAS-MCF.	CTURE, CEMENT SQ AMOUNT AND KIND OF O gals 5% aci S 3% KCL wtr 7,720 gals Ti ont'd on atta	PACKER SET (MD)  DUEEZE, ETC.  MATERIAL USED  d, flushed w/45  & 900 SCF N2/bb1  tan-2 gel 40 w/ ched sheet)  FUS (Producing or  P&A  GAS-OIL RATIO  GRAVITY-AFT (CORR.)
30"  13-3/8" OD  8-5/8" OD  5½" OD  29.  31. PERFORATION REC 11,003-11,01 10,828-10,83 9589-9598' = 9032-9046' = 8888-8905 & 7609-7617' = 33.*  DATE FIRST PRODUCTS  NONE  DATE OF TEST  FLOW. TUBING PRESS.  34. DISPOSITION OF G. 35. LIST OF ATTACHN LOGS AS 1 1 St	54.5# K- 32# S-8 17# L-8  TOP (MD)  ORD (Interval, si. 0 & 11028- 36 & 10840- = 10 .44" F = 29 .44" F = 11 .25" F 8918-8936' - 17 .50" F  ON PRODU  CASING PRESSUE  AS (Sold, used for  CENTS  Eed in Item	Dry Hole    CALCULATED 24-HOUR RA'   24-HOUR	38' 446' 2652' ,242'  SACKS CEMENT*  5.50" holes 2.44" holes  PROI Flowing, gas lift, pu  PROD'N. FOR TEST PERIOD  OIL—BBL.  DST & Incl	17½"   11"   7-7/8"	CEMENTI Redi-Mix to 425 sx Circ 1250 sx Circ 2035 sx Circ 30.  SIZE  ACID, SHOT, FRA RVAL (MD) 1,010' 3000 1,044' bb1  CAS-MCF.  GAS-MCF.  WATE	CTURE, CEMENT SQ AMOUNT AND KIND OF O gals 5% aci S 3% KCL wtr 7,720 gals Ti ont'd on atta	PACKER SET (MD)  DUEEZE, ETC.  MATERIAL USED  d, flushed w/45 & 900 SCF N2/bb1  tan-2 gel 40 w/ ched sheet)  FUS (Producing or  P&A  GAS-OIL RATIO  CHESTER  AT 1980

TITLE Dist. Drlg. Supt.



or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 83, below regarding separate reports for separate completions. General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Here 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Here 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in Item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in Item 38. Submit a separate report (page) on this form, adequately identified, for any interval in the separate produced, showing the additional data pertinent to such interval.

Here 29: "Sackteon interval records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Here 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.) Consult local State Hem 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements, or Federal office for specific instructions.

ers	TOP	EPTH TRUE VERT. DEPTH	, , , , , , , , , , , , , , , , , , ,
GEOLOGIC MARKERS		MEAS, DEPTH	11,153 10,700 10,400 10,258 9,332 7,600 2,020 2,020 950
38. GEOLO	2017	d retur	Upper Miss. Morrow Gas Atoka Strawn Gas Cisco Wolfcamp Queen SA T. Salt B. Salt
TS THERROF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING PAN, PLOWING AND SHUT-IN PRESSURES, AND RECOVERIES	DESCRIPTION, CONTENTS, ETC.	Open tool @ 6.30 AM 8/22/80 44/fait hlow	to good. Press build was 3 psi ins. Closed tool for 30 mins, n irf. Opened tool w/good blow, p to 3-3/4 psig in 30 mins. Open loke to pit w/fair blow & press Closed tool 120 mins, no gas Rel tools @ 10:45 AM & POH. 7761' (65 bbis) of slightly gas mud & fm fluid.
SED, TIME TOOL O	воттом	77671	
MART OF POROUS ZONES: show all important zones of forosity and contents thereof depth interval tested, cushion used, time tool open, blowin	TOP	75661	
 37, SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF DEPTH INTERVAL TESTED, CUSH	FORMATION	Wolfcamp	

Form 9-331 Dec. 1973 UNITED STATES

UNITED STATES

5. LEASE

ARTMENT OF THE INTERIOR

NM 074936

DEPARTMENT OF THE INTERIOR	NM_074936
GEOLOGICAL SURVEY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
SUNDRY NOTICES AND REPORTS ON WELLS (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9–331–C for such proposals.)	7. UNIT AGREEMENT NAME  8. FARM OR LEASE NAME AUG 1 3 1-91
1. oil gas other Dry Hole - P & A	McIntyre Federal  9. WELL NO.  O. C. D
2. NAME OF OPERATOR ARCO Oil & Gas Company Division of Atlantic Richfield Company	ARTECIA, OFFILE
3. ADDRESS OF OPERATOR	Loco Hills Morrow Gas
Box 1710, Hobbs, New Mexico 88240 4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 17-17S-30E
AT SURFACE: 1650 FSL & 1980 FWL AT TOP PROD. INTERVAL: As above AT TOTAL DEPTH: As above	12. COUNTY OR PARISH 13. STATE  Eddy N M
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	14. API NO.
	15. ELEVATIONS (SHOW DF, KDB, AND WD) 3660.1' GR
REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:  TEST WATER SHUT-OFF	VED
REPAIR WELL  PULL OR ALTER CASING   MULTIPLE COMPLETE  CHANGE ZONES  DEC 3  DEC 3	(NOTE: Report results of multiple completion or zone change on Form 9-330.)
ABANDON*  (other)  ARTESIA, NEW	MEXICO
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state including estimated date of starting any proposed work. If well is dimeasured and true vertical depths for all markers and zones pertinen	e all pertinent details, and give pertinent dates, irectionally drilled, give subsurface locations and to this work.)*
On 9/22/80, drld out cmt 11,148' to 11,166' PBD. 11,060'. Ran CBL 11,500' to surf, OK. Ran Corr	log, set pkr @ 10,921' and
Vann Guns @ 11,003-11,010' & 11,028-11,044' and .50" holes). GTS in 10 mins. Flwd to pit 6 hr:	perf w/ 2 JSPF (46- s, flwd ARO 242 MCFGPD, no fluid FTP
3.5# thru 48/64" ck. Ran swab, rec % BFW. On 9	/26/80 SITP 2200#. Flwd to pit 7 hrs
rec 249 MCFGPD, OBF, FTP 4# on 48/64" ck. 9/30/86 w/3,000 gals 5% acid, flushed w/45 bb1 trtd 3% K	CL wtr. All fluid contg 900 SCF No per
bbl. Flwd to pit 3 hrs, rec approx 30 BLW. Swb on 48/64" ck, 235 MCFGPD. SITP 2000# 72 hr SITP	d 2½ hrs rec 20 BLW, FFL dry. FTP 3#
11,003-11,044' w/ 27,720 gal Titan 2 gel 40, w/30	$6,000 \# 20/40 \text{ sd } \& 9,240 \text{ gals } CO_{\bullet}$ . Flwd
to pit 14 hrs, rec 100 BLW, well died. Swbd Mor BLW. Set WL plug in tbg recept @ 10,921'. Spot	row peris 11,003-11,044' 3 hrs rec 22 5 sx sd on pkr & recpt. Tagged sd @
10,890'. On 10/15/80 spotted 200 gals acetic ac Morrow 10,828-836' & 10,840-48' $\rm w/2$ JSPF. RIH $\rm w$	id @ 10,855'. POH w/ tbg. Perf'd
Subsurface Safety Valve: Manu. and Type	
18. I hereby certify that the foregoing is true and correct	
SIGNED School Dist. Drlg. St	upt. DATE11/24/80
APPROVED(This space for Federal or State office	ce use)
APPROVED BY SEL PETER W. CHESTER TILE	DATE
AUG 1 1 1901	
JAMES A. GILLHAM DISTRICT SUPERVISOR  See Instructions on Reverse Si	ide

Form 9-331
McIntyre Federal #8
1650' FSL & 1980' FWL
Sec 17-17S-30E, Eddy Co, N. M.
Page 2

Swbd 3 hrs, rec 40 BLW, swbd tbg dry. SI 4 hrs, no fluid entry. TP 0#. Acidized perfs 10,828-36' & 10,840-48' w/ 500 gals Mor-Flo BC acid, swbd tbg dry, no gas. Acidized w/1500 gals Mor Flo BC acid flushed w/ 31 bbls 3% KCL wtr & all fluid w/ 900 SCF N2. Flwd to pit  $1\frac{1}{2}$  hrs, rec 25 BLW. Swbd  $1\frac{1}{2}$  hrs, rec 12 BLW, no gas. POH w/tbg & pkr. RIH w/ cmt retr, set retr @ 10,716'. Squeezed perfs 10,828-11,044' w/ 1 gal. Morflow II in 10 BFW followed by 100 sx C1 "H" cmt w/ 8/10 of 1% Halad-9, RO 5 sx cmt. On 10/26/80 spotted 10% acetic acid 9615-9415'. Perf'd Canyon 9589-98' w/ 1 JSPF (10-.44" holes). RIH w/ pkr, set pkr @ 9484'. Swbd 9 hrs, rec 40 BLW, 25 BFW, 0 BO & GTSTM. ON SITP 150#. Swbd 6 hrs, rec 60 BLW & 0 BO, no gas. POH w/ tbg & pkr. Set cmt retr @ 9484'. Cmt squeezed perfs 9589-98' w/ 125 sx C1 "H" cmt, RO 10 sx cmt. Spot 200 gals 10% acetic acid @ 9080'. On 10/30/80 perf'd Wolfcamp 9032-9046' w/ 2 JSPF. Set Lok-set pkr @ 8883'. Swbd 2 hrs, rec 30 BLW, 0 BO, small show gas. Acidized perfs 9032-46' w/ 2000 gals 15% HC1-NE-FE acid flushed w/ 41 bbl 2% KCL wtr. Swbd 2 hrs rec 37 BLW, 0 BW, no gas. 65 hr SITP 100#. Swbd tbg dry. Perf'd Wolfcamp 8969-74' w/ 2 JSPF (11-.25" holes). Swbd 2½ hrs, rec 24 BLW, 5 BFW, tr of oil. Acidized perfs 8969-74' w/ 1000 gals 15% HCL-NE-FE acid flushed w/ 38 bbls 2% KCL wtr Swbd 5 hrs, rec 58 BLW, tr of oil. ON SITP 50#. Swbd 6 hrs, rec 10 BLW, tr of oil, gas TSTM. Perf'd Wolfcamp 8888-8905' & 8918-8936' w/ 1 JSPF = 37-.26" holes. Swbd 9 hrs, rec 21 BLW, tr of oil, gas TSTM. ON SITP 25#. Swbd 3 hrs, rec 6 BLW, tr of oil. POH w/ pkr & tbg. RIH w/ cmt retr, set retr @ 8830'. Squeezed Wolfcamp perfs 8888-9046' w/ 200 sx Cl "H" cmt w/ .8% CF9, RO 18 sx cmt. Spotted 200 gals 10% acetic acid @ 7650'. Perf'd Upper Wolfcamp 7609-17' w/ 2 JSPF = 17-.50" holes. RIH w/ pkr & tbg, set pkr @ 7493'. Swbd 2 hrs, rec 31 BLW. Acidized perfs 7609-17' w/ 500 gals 15% NE-FE acid flushed w/ 32 bb1 3% KCL wtr. Swbd 6 hrs, rec 44 BLW, 76 BFW. ON SITP 75#. Swbd 8 hrs, rec 150 BLW. ON SITP 75#. Swbd 8 hrs, rec 150 BLW, tr of oil. POH w/ pkr & tbg. RIH w/ cmt retr, set retr @ 7493'. Squeezed Wolfcamp perfs 7609-17' w/ 100 sx C1 "C" cmt, RO 25 sx cmt, spot 30' cmt plug on top of cmt retr. Spot 200' cmt plugs@ 2033-1833', 963-763', 532-332'. Removed wellhead, installed regulation dry hole marker, spot 10 sx cmt @ surface. P & A eff: 11/15/80. Clean & level location. FINAL REPORT.

Form 9-330 cont'd (Item 32) McIntyre Federal #8 1650' FSL & 1980' FWL Sec 17-178-30E, Eddy County

Acid, Shot, Fracture, Cement Squeeze, Etc.

36,000# sd & 9240 gals CO2.

10,828-10,836' & 2000 gals Mor-Flo BC acid flushed w/31 bbls 10,840-10,848' 3% KCL wtr & 900 SCF N2.

10,828-11,044' Squeezed w/1 gal Morflow II in 10 BFW, 100 sx Cl H cmt w/8/10 of 1% Halad-9.

9589-9598' Squeezed w/125 sx C1 H cmt.

9032-9046' Acidized w/2000 gals 15% HCL-NEFE acid, flushed w/41 bbls 2% KCL wtr.

8969-8974' Acidized w/1000 gals 15% HCL-NE-FE acid, flushed w/38 bbls 2% KCL wtr.

8888-8905' Squeezed w/200 sx Cl H cmt w/.8% CF9. 8918-8936'

8918-8936\* 8969-8974\* 9032-9046\*

7609-7617' Acidized w/500 gals 15% NE-FE acid, flushed w/32 bbls 3% KCL wtr. Squeezed w/100 sx Cl C cmt, 30' on top of cmt retr @ 7493'.

2033-1833' 200' cmt plug 963- 763' 200' cmt plug 532- 332' 200' cmt plug

Form 9-331 Dec. 1973

well

below.)

UNITED STATES DEPARTMENT OF THE INTERIOR

SUBSEQUENT REPORT OF RECEI

**GEOLOGICAL SURVEY** 

SUNDRY NOTICES AND REPORTS ON WELLS (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9–331–C for such proposals.)

other

P. O. Box 1710, Hobbs, New Mexico 88240 4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17

As Above 16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE,

2. NAME OF OPERATOR ARCO 011 & Gas Company Division of Atlantic Richfield Company

AT SURFACE: 1650' FSL & 1980' FWL AT TOP PROD. INTERVAL: AS Above

gas

well

3. ADDRESS OF OPERATOR

AT TOTAL DEPTH:

REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF FRACTURE TREAT SHOOT OR ACIDIZE

PULL OR ALTER CASING

MULTIPLE COMPLETE **CHANGE ZONES** 

REPAIR WELL

X

COP, COP	I File	مو
•	Form Approved. Budget Bureau <b>No. 4</b> 2–R1424	
	5. LEASE	
	NM 074936	
	6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
	7 HINT ACREMENT NAME RECEIVED	
WELLS pack to a different	7. UNIT AGREEMENT NAME	
	8. FARM OR LEASE NAME OCT 2 3 1980	
	FICTNITE FEDERAL	
	9. WELL NO. O. C. D.	
pany	8 ARTESIA, CHI.	
pany 🗸	10. FIELD OR WILDCAT NAME	
المراكسين	Loco Hills Morrow Gas	
88240	11. SEC., T., R., M., OR BLK. AND SURVEY OR	
. See space 17	AREA 17-17S-30E	
UL-K	12. COUNTY OR PARISH 13. STATE  Eddy N M	
	14. API NO.	
E OF NOTICE.	AT. ALL NO.	
	15. ELEVATIONS (SHOW DF, KDB, AND WD)	
	3660.1' GR	
RECEI	· · · · · · · · · · · · · · · · · · ·	
MECE	AFF	
- 0.0	1000	
OCT 20	1980 Worle: Report results of multiple completion or zone	
	change on Form 9-3301	
U.S. GEOLOGIC	AL SURVEY	
ARTESIA, NEI	N MEXICO	
n 5½" OD Pr	od csg & cmtg	
NS (Clearly state vork. If well is di id zones pertinen	e all pertinent details, and give pertinent dates, rectionally drilled, give subsurface locations and to this work.)*	
7767' Opened	d tool @ 6:30 AM w/ fair blow, increas	
	ins. Closed tool for 60 mins, no gas	
,	eased to 3-3/4 PSIG in 30 mins, opened!	5
	losed tool 120 mins, no gas to surf.	-
	761' (65 bbls) of slightly gas cut	
	to 11,244' TD @ 10:30 PM 9/11/80. Ra	ır
	IH w/5½" OD 17# L-80 csg @ 11,242', SC	
s mud flush	, 385 sx Cl H HOWCO light contg .3%	
	tg .75% CFR-2 & 5# KCL, Opened stage	
	e w/1000 gal mud flush followed by	
nite per sx	, followed by 300 sx C1 H neat. Circ	<u>.</u>
DUU#. F WOE.	120 hrs. Press tested csg to 1600 F	
	Set @Ft.	
	Set WFt.	

CHANGE ZONES HARTESIA, NEW MEXICO	٠
(other) DST, run 5½" OD Prod csg & cmtg	
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dincluding estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations measured and true vertical depths for all markers and zones pertinent to this work.)*	ates, and
On 8/23/80 ran DST #1 Wolfcamp 7566-7767' Opened tool @ 6:30 AM w/ fair blow ing to good. Pressure build was 3 PSIG in 15 mins. Closed tool for 60 mins to surface. Open tool w/ good blow, press increased to 3-3/4 PSIG in 30 min choke to pit w/fair blow & press for 30 mins. Closed tool 120 mins, no gas t Released tools @ 10:45 AM & POH. Reversed out 4761' (65 bbls) of slightly gadrlg mud & fm fluid. Finished drlg 7-7/8" hole to 11,244' TD @ 10:30 PM 9/1 GR-DLL, GR-FDC-CNL w/ Caliper, GR-Sonic log. RIH w/5½" OD 17# L-80 csg @ 11 @ 7861'. Cmtd 1st stage w/ 1000 gals mud flush, 385 sx C1 H HOWCO light con CFR-2 and 5# KCL followed by 450 sx Class H contg .75% CFR-2 & 5# KCL, Opene collar, circ 140 sx cmt to surf. Cmtd 2nd stage w/1000 gal mud flush follow 900 sx C1 C w/3% Econolite, 5# Gilsonite per sx, followed by 300 sx C1 H nea 75 sx cmt to surf. PD @ 6:20 PM w/3500#. WOC. 120 hrs. Press tested csg for 30 mins, OK.  Subsurface Safety Valve: Manu. and Type	s, no s,ope o sur s cut 1/80. ,242' tg .3 d stared by tto 16
18. I hereby certify that the foregoing is true and correct  SIGNED	
(This space for Federal or State office use)	
APPROVED BY TITLE DATE ACCEPTED FOR RECO	1
*See Instructions on Reverse Side  U.S. GEOLOGICAL SU  ROSWELL, NEW MEX	RVEY

Form Approved.

Form 9-331

N.M.O.C.D. COPY

Dec. 1973	ED OTITEO		Budget Bure	au No. 42-R1424	
	ED STATES	5: LEASE	07/026		
	OF THE INTERIOR		074936	Norman	-
GEOLOG	ICAL SURVEY	-	ALLOTTEE OR TE	RIBE NAME RECE	iver:
	ND REPORTS ON WELLS	7. UNIT AGRE	EMENT NAME		
(Do not use this form for proposals to	drill or to deepen or plug back to a different proposals.)			<del>-SEP -</del>	100
		8. FARM OR L		Ð	198
1. oil gas k o	ther	9. WELL NO.	redelai		()
2. NAME OF OPERATOR ARC	CO Oil & Cae Company	- 8		ABIRTAN O	r Prom
Division of Atlant:	ic Richfield Company	10 PIELD OR W	/ILDCAT NAME	Coo	
3. ADDRESS OF OPERATOR P. O. Box 1710 Hol	مسل bbs, New Mexico 88240		<del></del>		-
	RT LOCATION CLEARLY. See space 17		, M., OR BLK. At	ND SURVEY OF	₹
	1980' FWL (Unit Letter"K"	סלד לד	30E		
AT SURFACE:	- January Control Metabolish	12. COUNTY OF	R PARISH 13. S	STATE	-
AT TOP PROD. INTERVAL: AT TOTAL DEPTH:		Eddy	New	Mexico	_
AS A	Above	14. API NO.	•• .		-
•	TO INDICATE NATURE OF NOTICE,		·		
REPORT, OR OTHER DATA		15. ELEVATION 3660.1'		(DB, AND WD)	)
REQUEST FOR APPROVAL TO:	SUBSEQUENT REPORT OF:				
TEST WATER SHUT-OFF FRACTURE TREAT					
SHOOT OR ACIDIZE					
REPAIR WELL			esults of multiple o	ompletion or zone	e
PULL OR ALTER CASING MULTIPLE COMPLETE	Ц	change o	on Form 9–330.)	•	
CHANGE ZONES	H			:	
ABANDON*					
(other)	Run Intermediate & C	ement			
17. DESCRIBE PROPOSED OR Concluding estimated date of measured and true vertical d	COMPLETED OPERATIONS (Clearly sta starting any proposed work. If well is of lepths for all markers and zones pertine	te all pertinent ded directionally drilled nt to this work.)*	tails, and give p	ertinent dates locations and	i
	hole to 2652' 8-5-80. RIH "OD csg w/ 1050 sx pace s				<i>#</i>
	o seal/sk followed by 200				
	5 AM 8-6-80. WOC 18 hrs.				•
for 30 mins, OK.		KEC	EIVEL	)	
		•			
		AUG	1 4 1980	•	
				-17	
			LUGICAL SURVI		
·		AKIEŞIA	I'' WEM WEXICO	<b>;</b>	*
Subsurface Safety Valve: Manu. a	nd Type		Set @	Ft	:.
18. I hereby certify that the foreg	- //	•			
SIGNED TO TO, METCH	nief TITLE Dist. Drlg.	Supt DATE	8/11/80		<u>-</u>
	(This space for Federal or State of	fice use)	ACCEPTED	FOR RECORD	-
APPROVED BY	TITLE	DATE	·		-
COMMITTEES OF MITTHOTAL IN MAT				D 1000	
•	·		AUG 2	2,7,1980	- 1

## N.M.O.C.D. COPY

Form 9-331

APPROVED BY \_\_\_\_\_\_CONDITIONS OF APPROVAL, IF ANY:

Form Approved.

Dec. 1973	Budget Bureau No. 42-R1424
UNITED STATES	5. LEASE
DEPARTMENT OF THE INTERIOR	NM 074936
GEOLOGICAL SURVEY RECEIVED	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
SUNDRY NOTICES AND REPORTS ON WELLS	7. UNIT AGREEMENT NAME
(Do not use this form for proposals to drill or to deepen or plug per total attendance reservoir. Use Form 9-331-C for such proposals.)	S. WILLIA OIL EDIGE IAVILLE
1. oil gas well other O. C. D.	Mc Intyre Federal
Well Well Other	9. WELL NO. 8
Division of Atlantic Richfield Company	10., FIELD OR WILDCAT NAME
1) Mo	
P. U. BOX 1/1U, HODDS, New Mexico 8824U	11. SEC., I., R., M., OR BLK. AND SURVEY OR
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.) 1650' FSL & 1980' FWL Unit Letter "K"	AREA 17-17S-30E
AT SURFACE:	12. COUNTY OR PARISH 13. STATE
AT TOP PROD. INTERVAL:	Eddy N. M.
AT TOTAL DEPTH: As above	14. API NO.
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	
	15. ELEVATIONS (SHOW DF, KDB, AND WD) 3660.1' GR
REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF: TEST WATER SHUT-OFF	
FRACTURE TREAT	
SHOOT OR ACIDIZE	
REPAIR WELL UP TO THE PULL OR ALTER CASING TO THE TOTAL TO THE PULL OR ALTER CASING TO	(NOTE: Report the imprecompletion or zone change on the Colon
MULTIPLE COMPLETE	
CHANGE ZONES	AUG 1 1 1980
(other) Spud run conductor pig	
surf csg & cmt.	U.S. GEDLUGICAL SUDVEY
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly statincluding estimated date of starting any proposed work. If well is d measured and true vertical depths for all markers and zones pertinent.	irectionally, drilled give substitutions and
On 7-29-80 ran 38' of 30" conductor pipe. Cmtd hole @ 1:00 PM 7-31-80. Drld to 450'. RIH $w/$ 3	
Cmtd w/ 425 sx Cl "C" cmt w/ 2% CaCl. Circ 38 s	ex cmt to surf. WOC 11 hrs. Pressure
tested csg to 1000# for 30 mins, OK. Volume of	
w/ 2% CaCl. Circ 50 cut ft cmt to surf. Approx	rimate cmt slurry when mixed was 79°.
Estimated minimum formation temperature in zone	of interest was 67°. Estimate of cmt
strength @ time of test was 1200 PSIG. Actual t csg was 11 hrs.	time cmt was in place prior testing
csg was it his.	
Subsurface Safety Valve: Manu. and Type	Set @ Ft.
18. I hereby certify that the foregoing is true and correct	
SIGNED TO MELDANIE TITLE Dist. Drlg. S	Supt. date 8/6/80
(This space for Federal or State offi	ACCEPTED FOR RECORD

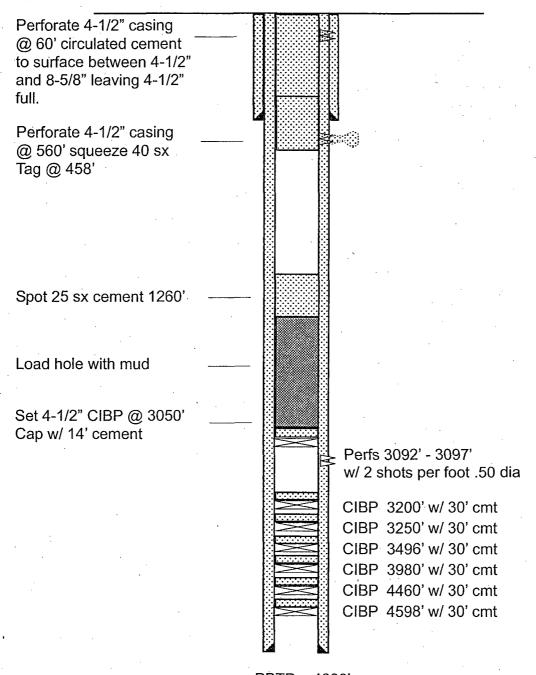
AUG 131980

U.S. GEOLOGICAL SURVEY ROSWELL, NEW MEXICO

## PLUGGED WELLBORE DIAGRAM

MCINTYRE A 010 API # 30-0-15-23382 990' FSL & 2290' FEL SECTION 20-T17S-R30E EDDY COUNTY, NM STATUS: P&A ON 9/20/96

CA	SING ,	Depth Set	Hole Size	Cement -
8-5/8"	24# K-55	510'	11"	215 sx, Circ 20 sx to pit
4-1/2"	10.5# K-55	4700'	7-7/8"	2777 sx



PBTP = 4680' Total Depth 4,700 ft.

	N.M. Oil Cr	. Division
. 4 . 4 . 6 . 6	ITED STATES 811.5 Ist Street	
	NT OF THE INTERIOR ATOMA NA 88	Expires: March 51, 1975
BUREAU OF	LAND MANAGEMENT 11 OCT - 8 1996	5. Lease Designation and Serial No. LC-057634
SUNDRY NOTICES	AND REPORTS ON WELLS	11111
	rill or to deepen or reentry to a different leserm	6. If Indian, Allottee or Tribe Name
Use "APPLICATION FO	OR PERMIT—" for such proposals	1 to an Care Care
0110141	T IN TOIGH IOATC	7. If Unit or CA, Agreement Designation
	TIN TRIPLICATE DECEIVED	
1. Type of Well  XXI Oil  Gas	Magazine	
12 Well		8. Well Name and No. McIntyre A #10
2. Name of Operator Mack Energy Corporation	NOV - 1 1996	9. API Well No.
3. Address and Telephone No.	0.05 53334	
P. o. Box 960, Artesia, NM 88	3211-0960 (505) QAL GON. DIV.	30-105-23382  10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey I	Description) DIST. 2	Grbg Jcksn &rvr Q GGB SS
	2290	11. County or Parish, State
Sec.20 T-17-S R-30-E 990' FSL	& 2310' FEL	Eddy. NM
2 CHECK APPROPRIATE BOX	(s) TO INDICATE NATURE OF NOTICE, REI	PORT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTI	ON
Notice of Intent	XXXAbandonment	Change of Plans
50°K	Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing
<b>—</b>	Casing Repair	Water Shut-Off
Final Abandonment Notice	Altering Casing Other	Conversion to Injection Dispose Water
	Other	(Note: Report results of multiple completion on Well
D. Describe Proposed or Completed Operations (Clearly state a	In pertinent details, and give pertinent dates, including estimated date of st	Completion or Recompletion Report and Lordinal arting any proposed work. If well is directionally drilled,
	cal depths for all markers and zones pertinent to this work.)*	11-8-96
1) Set 4½ CIBP @ 3050' Cap W	/14' cement	rv F
2) Load hole with mud		
3) Spot 25sx cement 1260'		0.4501
4) Perforate 4½ casing @ 560	squeeze 40 sx W.O.C. Tag cement to	p @ 408 - 41 c 8-5/8
5) Perforate 4½ casing @ 60' leaving 4½ full Set PA ma	Circulated cement to surface between	11 42 & 6-376
6) Job completed 9/20/96		agent in considerable to a consi
		TAMB MADE
		100
	Apparoved as to plugging of the well bess.	OCT 15 1895
	Liability under bond is retained until	, in the second
	surface restoration is completed.	The state of the s
		The state of the s
I hereby certify that the foregoing by true and correct		
Ma al man Vila	A Supervisor	09/26/97
(This space for Federal or State office use)	Title Oup CT V 1301	Date
ORIG. SGD.) DAVID R. GLA	ASS PETROLEUM ENGINEER	Date OCT 3 0 1906

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

tions of approval, if any:

Form 3:60-5 (June 1990)		D STATE		FORM APPROVED Budget Bureau No. 1004-0135
MMOCD	DEPARTME	LAND MAN	INTERIOR AGEMENT	Expires: March 31, 1993  5. Lease Designation and Serial No.
811 S.1st	BUREAU OF	EAND MAIN	AGEMENT	
Artesia, N.M. 88	210SUNDRY NOTICES	S AND REPO	RTS ON WELLS	LC-057634  6. If Indian, Allottee or Tribe Name
			en or reentry to a different reservoi	
	Use "APPLICATION FO	OR PERMIT—	' for such proposals	
	SUBMI	T IN TRIPLIC	CATE	7. If Unit or CA, Agreement Designation
i. Type of Well			DECEMEN	
Oil Gas	1 Other		In a series of the series of t	8. Well Name and No.
2. Name of Operator			D 4 400C	McIntyre A #10
Mack Energy			JUL 2 4 1996	9. API Well No.
3. Address and Telephone		211 2262	COST ON COMO DE TOUR	30-015-23382 10. Field and Pool, or Exploratory Area
	), Artesia, NM 88. age, Sec., T., R., M., or Survey I		(50) 1748-C3(9) N. DIV.	Grayburg Jackson 7RVS-
4. Location of Well (Pool	age, Sec., 1., R., IVI., of Survey I	Description	D18T. 2	II. County or Parish, State OGGB-S
			WEET CONTROL	Oddp 5
Sec. 20 T-17	/-S R-30-E 990 F	SL 2310 FE	. ·	Eddy, NM
12. CHECK			ATE NATURE OF NOTICE, REP	
	SUBMISSION	]	TYPE OF ACTIO	
		<del> </del>	ਚ	
X Notice	of Intent		Abandonment	Change of Plans  New Construction
C.bess	uent Report		Recompletion Plugging Back	Non-Routine Fracturing
C Sanised	dent report	•	Casing Repair	Water Shut-Off
Final A	Abandonment Notice	1	Altering Casing	Conversion to Injection
			Other	Dispose Water
				(Nute: Report results of multiple completion on Well Completion or Recompletion Report and Log form )
escribe Proposed or C	ompleted Operations (Clearly state a	ill pertinent details, a	nd give pertinent dates, including estimated date of star trkers and zones pertinent to this work.)*	ting any proposed work. If well is directionally drilled,
give subsurface to	ations and measured and true verti	ical depuis for all ma	trkers and zones pertinent to this work.	
	C.I.B.P. at 3050'	cap w/35'	cement	
	ole w/mud			
	sxs cement plug		/ates 1240'   50' below 560' squeeze w/4	O sys cement and tag
			te cement to surface-set P.	
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A I harabi amidi tha d	foregoing is true and correct ;		· ·	
Signed Kayn	can 17 Talistics	nevet Title_	Supervior	Date 7-16-96
(This space for Federal	OUNT HOLO	Title_	PETROLEUM ENGINEER	JUL 18 1996
ditions of approval.	E ATTACHED			

		PANY	Energy Corpor	20101		
		LEASE & WELL NO	McIntyre A #1			
		FORMATION	Padu NM			UHIIL
H H		COUNTY & STATE	Eddy, NM			
		The second secon			RAYMOND MA	
· #			<del></del>		BUS. (505)	R, P & A OPERATION
					FAX (505)	
						05)390-0540
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						process of a standard
	8 5/8 cm	t. w/215 sxs circ	·			·
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	Oper. Perfs		i		<u> </u>	
		w/30' cmt. 3-20		, ·	1	
		w/30 cmt. 11-20			<del></del>	
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	4680' P.B.				<del> </del>	!
		cmt. w/2777 sxs	T.O.C. 1100'	: 1	<u>i</u> .	
	4½ casing 4	700	1 :			
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, , ,						
CONVE	ASION FACTORS		PIPE VOLUMES	<del></del>	HYE	ROSTATIC PRESSURE
1 : i	By TO OBTAIN	0.00545	x I.D. in inches =	Cu. Ft./Ft.	FORV	NATER:
ULTIPLY		0.0407	x I.D. in inches =		0.434	x Depth in Feet = PSI.
IULTIPLY reis	5.6146 Cubic Feet	0.0407	XI.D. In inches =	Gals./Pt.		
, ,	7.4806  Gallons 0.1337  Cubic Feet	0.0407	x I.D.? in inches =	Bbls/Ft.	FOR C	THER FLUIDS: x Depth x Sp. Gr. = PSI

							_		•				
Form 6-330 (Rev. 5-63)	•		11	PM TEI	) ST	NM	O.C.D.	CO.	PT N DUP	~~ATE•	t	Form	a approved.
•	DF	PΔF	TM	JTC	OF T	HE IN	TERIO	D		other in			et Bureau No. 42-R355.5.
c/SF						URVEY			r	everse side)	5. LEASE	DESIGN	ATION AND SERIAL NO.
				····	-	· · · · · · · · · · · · · · · · · · ·			·		LC-057		LOTTEE OR TRIBE NAME
WELL CO	MPLE	MOIT	1 OB	RECO	MPLI	ETION	REPORT	A١	1D F	OG *			
1s. TYPE OF WEI	LL:	01 W	L X	GAS WELL		DRY 🗌	Other		Λ		7. UNIT AG	REEME	NT NEXE
b. TYPE OF COM									<b>?</b>				
WELL X	WORK OVER	D)	EEP-	PLUG BACK		ESVR.	Other		$\mathcal{C}^{\circ}$		S. FARM OF	R LEAS	MAR 8 0 1991
2. NAME OF OPERA	ron						'Aley'	1,	$X_{i}^{i}$	2	McInty	re_A	Vinte 2 2 1001
3. ADDRESS OF OPE	Holly	y Ene	rgy	Inc./		<del></del>	<u>,, , , , , , , , , , , , , , , , , , ,</u>			<u> </u>	- B. WELL N	·	
						Nov. Mov		3.	ر. نو	Y/A	10, FIELD	IO AND PO	OCL, OR WILDCAT
4. LOCATION OF WE	I.L (Repo	rt locat	ion clca	irly and in	accorda	nce with an	y State requi	remei	îta)* (	50 \ COV	(Cravbur	e-Ja	ickson sk. Q-L
At surface 99	0 FSL	231	0 FE	L Sec	20 T-	17S R-3	OE				1. SEC., T.	, R., M	CKSON SR. Q-L
At top prod. in	terval rep	orted b	elow						·				
At total depth								•		· ·•			
S	ame				14.	PERMIT NO.		DATE	ISSUED	*	12. COUNTY	OB	S R-30E 13. STATE
•	•						}			•	Eddy		NM
15. DATE BPUDDED	16. DAT	E T.D.	REACHE	D   17. DA	TE COMP.	L. (Ready t	o prod.)   18	3. ELE	VATIONS	(DF, REB,	RT, GR, ETC.)*	19.	. ELEV. CABINGHEAD
6-29-80		11-8		2-1-						5 GR		<u> </u>	3614.5
20. TOTAL DEPTH, MD			•	K T.D., MD 4	11	22. ACCE	PIFF CARS	REC	JRD 1	RILLED BY	ROTARY TO	ors	CABLE TOOLS
4700 24. PRODUCING INTER	PV41 (4)	325	0	FT108T0	P BOTT	PET	ER W. CI	IES.	tr =	<del></del>	Surf-TD	<del></del> ;	25. WAS DIRECTIONAL
AT. TRODUCING INTE	**************************************	OF IEI			7, 50114		1AR 24						BURVEY MADE
San Andres	3092	-309	7	•	]	17	IMII A 4	וסכו					No.
26. TIPE ELECTRIC					<del>}</del>	U.S. GE	OLOGICAL	SUS	VFY			27.	WAS WELL CORED
DLL/ML CI	DL/CNL	СВ	L/GR				ell, new i					<u> </u>	No
28.						CORD-(Rep	ort all string		n well)	·	,		
CASING SIZE	-	HT, LB.	/FT.	DEPTH S		- Но	LE SIZE	-		CEMENTING	RECORD		AMOUNT PULLED
8-5/8	_	4# 0.50	11	510 4700			11"	-		lass C			none
4 1/2	-	0.50	or	4700		_	7-7/8	-21	77 sa	acks			none
	-					_		\ <del></del>				<del></del>	
29.			LINE	RECORI	)				30.		TUBING REC	ORD	
BIZE	TOP (M	(D)	BOTT	OM (MD)	SACKS	CEMENT*	SCREEN (M	D)	£12	J	DEPTH SET (	MD)	PACKER SET (MD)
					-				2-3	3/8	3090		
31. PERFORATION REC	OED (Int	erval, s	ize and	number)	1		32.	-Δ (	ID SE	OT FRACT	TURE, CEMEN	IT SO	HEEZE ETC
3092-3097	w/2	shot	s per	foot	.50 d	lia	DEPTH IN		<del></del>				MATERIAL USED
	•		•										
		•			•								
									·	SEE	ATTACHED	SH	EET
33.*				<del></del>		ррог	HCTION			<u> </u>			<del></del>

WELL STATUS (Producing or shut-in) DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping-size and type of pump) 2-1-81  $1\frac{1}{2} \times 10$ pumping producing DATE OF TEST PROD'N. FOR TEST PERIOD HOURS TESTED CHOKE SIZE OIL-BBL. GAS-MCF. WATER-BBL. GAS-OIL RATIO 10-2-80 24 16 MCF/D 1778 FLOW. TUBING PRESS. CASING PRESSURE CALCULATED 24-HOUR RATE OIL GRAVITY-API (CORB.) GAS--MCF. WATER-BBL. 12# 9 16 MCF/D 35.1 34. DISPOSITION OF OAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY vented Bob Loyd 35. LIST OF ATTACHMENTS

2- degree of inclination- 2-DLL 2- CNL 2-CBL & GR

36.	1	bereby	certify	that	the foregoing	gr.d attached	information	is complete	and correct	as determine	d from	all available	records	
					et Zon					intendent			. 3-	t i
	91	GVED		ULLU	21.209	<i>i-f</i>	TIT	LE				DAT	E	 <u> </u>

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	6:30a.m.				• .	•		
	•	1590 sacks		=			e e	,
	•	ζ-55 10.50#	stc casing	g and cemen	nt with 8	87 sacks	of Clas	5 <b>5</b>
Drill 77	/8 hole to	4701						•
proposed work, nent to this work	OR COMPLETED OFF If well is direction.)*	ERATIONS (Clearly stonally drilled, give	ate all pertinent subsurface locati	details, and give ons and measured	pertinent dat l and true ver	es, including tical depths f	estimated da or all marker	te of startings and zones
(Other)				(North	e: Report resu letion or Reco	lts of multipl opletion Repo	e completion rt and Log fo	rm.)
SHOOT OR ACIDIZE	<u>  </u>	ABANDON* CHANGE PLANS		•	set prod	luction o	ABANDONME asing	V V
FRACTURE TREAT	·	MULTIPLE COMPLETE	<del></del>	WATER SHU FRACTURE :	,		ALTERING C	
TEST WATER SHUT	NOTICE OF INTER	VIION TO: PULL OR ALTER CASI	rya 🗐	WARRE CO.	ſ	EQUENT REPOR	REPAIRING	wir. [
		ppropriate Box T	o Indicate N	ature of Notice		•		
		3613	- /				ldy	<u>и м</u>
PERMIT NO.		15. ELEVATIONS (	Show whether DF.	RT, GR. etc.)		12, cou	TY OR PARIS	7S_R-301 13. state
•								- -
	990' FSL 2	310' FEL. Se	ec 20 T-17	S R-30E		11. sec.	T. R. M. OR	Jackson
LOCATION OF WELL See also space 17 i At surface	(Report location of below.)	tesia. New Medical Research	dance with any	State Pequirement	<u> ŞFFICE</u>	10. FIEL	D AND POOL,	OR WILDCAT
		torio Mari N	fortion ddo	O. C.		9. WELL	NO.	
Holly ADDRESS OF OPERA	Energy Inc	<u> </u>		JUL 17	เลดก	McInt	vre A	
WELL WELL				11.11 1 .7	1000	8. FARM	OR LEASE NA	ME
OIL GAS				RECEI		7. UNIT	AGREEMENT N	AME
(170 not use t		SICES AND F Sals to drill of to C ATION FOR PERMI			reservoir.			
		GEOLOGICAL					057634 DIAN, ALLOTTI	EE OR TRIBE
	PELVICI	MENT OF TH	TE INTERT	Off verse side)		D. LEAS	E DESIGNATION	AND SERIAL

#### Paddock

Perf: 4604-19 4626-34 4636-46 4660-70 2 shots per foot. Treat w/1500 gl. 15%-recovered formation water. Set CIBP @ 4598' with 30' cement on top (Paddock)

Perf: 4475-79 4489-91 4495-4501 4505-10 with 2 shots per foot. Treat with 1500 gl 15% acid. Recovered formation water set CIBP @ 4461 w/30' cement on top. (San Andres)

Perf: 4008-14 4018-30 4032-36 4045-48 4052-56 4060-66 4069-71 4076-79 4087-89 4092-96 with 2 shots per foot. Acidize with 1500 g1 15% acid. Fraced well with 40,000 g1 gelled acid water 18,000# 100 mesh sand and 30,000# 20/40 sand.Recovered formation water and traces of oil. Set CIBP @ 3980' with 30' cement on top

San Andres

Perf: 3523-26 3531-50 3563-65 3578-81 3662-68 2 shots per foot. Acidize with 1500 gl 15% acid. Fraced with 20,000 gl Gelled water. 24,000# 100 mesh. Recovered formation water no oil. Set CIBP @3496' w/30' cement on top

San Andres

Perf: 3272,73,83,84,3302,04,06,34,39,44,48,51,53,56,61,63,65,71,73,75,86,88,90,98,3401, 05, 07,12,15,20,21,35,3437,1 shot per foot.Fraced 20,000 gl gelled water. 24,00# 100 mesh, 19,000# 20/40 sand. Recovered formation water no oil. Set CIBP @ 3250 with 30 cement on top.

San Andres

Perf: 3092-3097 with 2 shots per foot. Fraced with 12,000 gl. gelled water. 4000# 100 mesh 8000# 20/40 sand

ACCEPTED FOR RECORD
PETER W. CHESTER

MAR 24 1981

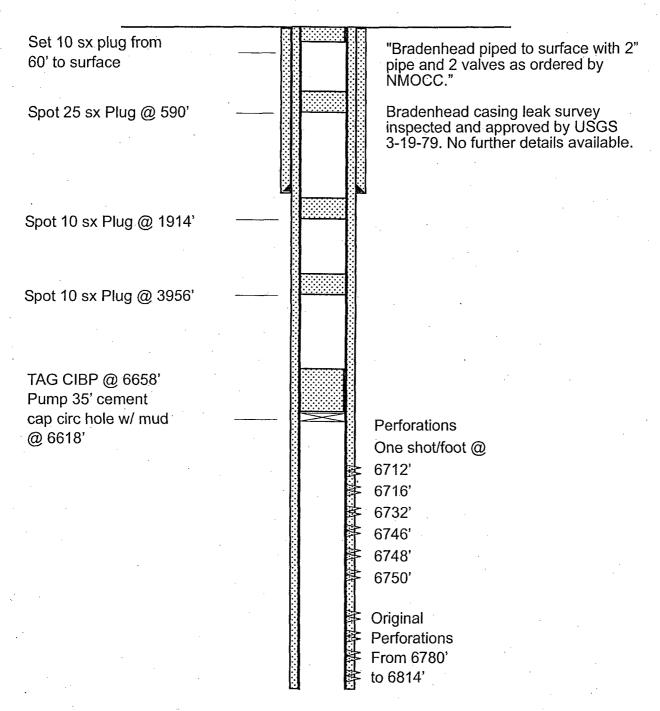
U.S. GEOLOGICAL SURVEY ROSWELL, NEW MEXICO

	N.11.O.C.D.	COLL		( )
DEPARTM	) .TED STATES ENT OF THE INTER	SUBMIT IN TR. (CATI (Other instructions on record verse side)	Budge	approved. t Bureau No. 42-R1424 NATION AND BERIAL NO.
GI	EOLOGICAL SURVEY		_ IC-	-057634 LLOTTEE OR TRIBE NAME
(Do not use this form for proposal	CES AND REPORTS  Is to drill or to deepen or plug TION FOR PERMIT—" for such	back to a different reservoir.	6. IF ISDIAS, A	LLOTTEE OR TRIBE NAME
OIL GAS OTHER			7. UNIT AGREEM	ENT NAME
NAME OF OPERATOR			8. FARM OR LEA	SE NAME
Holly Energy Inc.			McIntyr	re A
P.O. Box 726 Art Location of well (Report location clease also space 17 below.)			ĺ	OOL, OR WILDCAT  52 G. 5
990' FSL 2310' FF	EL Sec 20 T-17S R-3	OE	RUBVEY O	R AREA
4. PERMIT NO.	15. ELEVATIONS (Show whether D	F, RT, GR, elc.)		
	3613.5		Eddy	N.M.
Check App	ropriate Box To Indicate 1	Nature of Notice, Report, or	Other Data	
NOTICE OF INTENTI	ON TO:	RUBSE	QUENT REPORT OF:	
I	LL OR ALTER CASING CATTLE COMPLETE	WATER SHUT-OFF FRACTURE TREATMENT	<del></del> i	RING WELL
SHOOT OR ACTUIZE AR	ANDON*	(Other) Spud & See  (Note: Report result	 t_surface_pi	De X
SHOOT OR ACTUIZE  REPAIR WELL  (Other)	ANGE PLANS  Clearly state all pertinor	(Other) Spud & State (Note: Report result Completion or Recom	t surface pi ts of multiple completion Report and I	ed date of starting an
SHOOT OR ACHIZE  REPAIR WELL  (Other)  DESCRIBE PROPOSED OR COMPLETED OPERA proposed work. If well is directions nent to this work.)  Spud Well 8:00 a.m.	ange Plans  (Clearly state all pertine)  (High drifted, give subsurface local	(Other) Spild & SE- (Note: Report result Completion or Recom it details; and give pertinent date tions and measured and true verti	surface pi ts of multiple comp pletton Report and i s, including estimat cal depths for all n	etion on Well Log form.) ed date of starting an narkers and zones perti
SHOOT OR ACREE AR REPAIR WELL CHAPTER OF THE PROPOSED OR COMPLETED OPERA proposed work. If well is directions nent to this work.)*  Spud Well 8:00 a.m.  Drill 11" hole to 52	ANGE PLANS  ATIONS (Clearly state all pertinet ally drilled, give subsurface local control of the state all pertinet ally drilled, give subsurface local control of the state all pertinet	(Other) Spud & St. (Note: Report result Completion or Recom It details, and give pertinent date titions and measured and true verti	t surface pi	etion on Well Log form.) ed date of starting an narkers and zones perti
SHOOT OR ACHOIZE REPAIR WELL  (Other)  DESCRIBE PROPOSED OR COMPLETED OPERA proposed work. If well is directions nent to this work.)  Spud Well 8:00 a.m.  Drill 11" hole to 52  with 215 sacks class	ANGE PLANS  Clearly state all pertine ally drilled, give subsurface local control of the subsu	(Other) Spud & St. (Note: Report result Completion or Recom It details, and give pertinent date titions and measured and true verti	t surface pi ts of multiple completed Report and is, including estimatical depths for all m	etion on Well Log form.) ed date of starting any narkers and zones perti
SHOOT OR ACROIZE  REPAIR WELL  (Other)  DESCRIBE PROPOSED OR COMPLETED OPERA  proposed work. If well is directions nent to this work.)  Spud Well 8:00 a.m.  Drill 11" hole to 52	ANGE PLANS  Clearly state all pertine ally drilled, give subsurface local control of the subsu	(Other) Spud & St. (Note: Report result Completion or Recom It details, and give pertinent date titions and measured and true verti	t surface pi ts of multiple completed Report and is, including estimatical depths for all m	etton on Well Log form.)  ed date of starting an narkers and zones perti
SHOOT OR ACREEZE  REPAIR WELL  (Other)  DESCRIBE PROPOSED OR COMPLETED OPERA proposed work. If well is directions nent to this work.)*  Spud Well 8:00 a.m.  Drill 11" hole to 52  with 215 sacks class	ANGE PLANS  Clearly state all pertine ally drilled, give subsurface local control of the subsu	(Other) Spud & St. (Note: Report result Completion or Recom It details, and give pertinent date titions and measured and true verti	t surface pits of multiple completed Report and is, including estimated depths for all many and cement	etion on Well Log form.) ed date of starting an narkers and zones perti
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SHOOT OR ACTOIZE REPAIR WELL  (Other)  To DESCRIBE PROPOSED OR COMPLETED OPERA proposed work. If well is directions nent to this work.)  Spud Well 8:00 a.m.  Drill 11" hole to 52  with 215 sacks class	ANGE PLANS  CTIONS (Clearly state all pertine)  6-29-80  20' & set 510' 8 5/  3 C 2% cacl. Plug decomply the set 510 of the se	(Other) Spud & St. (Note: Report result Completion or Recom It details, and give pertinent date titions and measured and true verti	t surface pits of multiple completed Report and is, including estimated depths for all many and cement	ettion on Well Log form.)  ed date of starting an narkers and zones perti

### PLUGGED WELLBORE DIAGRAM

MCINTYRE A 004
API # 30-0-15-04222
1650' FSL & 410' FEL
SECTION 20-T17S-R30E
EDDY COUNTY, NM
STATUS: P&A ON 11/8/02

CASING	Depth Set	Cement
8-5/8" 24# J-55	1860'	580 sx
5-1/2" 15.5# J-55	6857'	750 sx



Total Depth 6,857 ft.

C151

Form 3160-5 (June 1990)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31,1993

5. Lease Designation and Serial No.

LC-054280

SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allottee or Tribe Name Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT-" for such proposals 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE I Type of Well X Oil Well Gas Well 8. Well Name and No. 2. Name of Operator McIntyre A #4 RECEIVED 9. API Well No Mack Energy Corporation 3. Address and Telephone No. 30-015-04222 10. Field and Pool, or Exploratory Area P.O. Box 960, Artesia, NM 88211-0960 4. Location of Well (Footage, Sec., T. R., M. or Survey Description) Loco Hills Abo 11. County or Parish, State 1650 FSL & 410 FEL, Sec. 20, T17S R30E, I Eddy, NM CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Notice of Intent Change of Plans Recompletion New Construction Subsequent Report Plugging Back Non-Routine Fracturing Casing Repair Water Shut-Off Final Abandonment Notice Altering Casing Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) 13 Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work )\* 10/07/2002 Tag CIBP @ 6658', pump 35' cement cap, circ hole w/mud @ 6618', spot 10 sx plug @ 3956', spot 10 sx plug @ 1914', spot 25 sx plug @ 590', set 10 sx plug from 60' to surface. 10/08/2002 Install dry hole marker. 14. I hereby certify that the foregoing is true ar 10/30/02 Production Analyst Title (This space for Federal or State offi Approved by Conditions of approval, if any: Title

CCD-Artia

Form 3160-5 (June 1990)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED

Budget Bureau No. 1004-0135

Expires: March 31,1993

Expires: March 31,1993

5. Lease Designation and Serial No.

LC-054280

(Note: Report results of multiple completion on Well

SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allottee or Tribe Name Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE I Type of Well Oil Well 8. Well Name and No. 2 Name of Operator 9 McIntyre A #4 Mack Energy Corporation 9. API Well No. RECEIVED 3. Address and Telephone No. 30-015-04222 P.O. Box 960, Artesia, NM 88211-0960 😌 10. Field and Pool, or Exploratory Area 4. Location of Well (Footage, Sec., T. R., M. or Survey Description) Loco Hills Abo 11. County or Parish, State 1650 FSL & 410 FEL, Sec. 20 T17S R30E Eddy, NM CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12. TYPE OF SUBMISSION TYPE OF ACTION Notice of Intent Change of Plans Abandonment Recompletion New Construction Subsequent Report Plugging Back Non-Routine Fracturing Casing Repair Water Shut-Off Altering Casing Conversion to Injection Final Abandonment Notice Extend TA Status

Completion or Recompletion Report and Log form.)

13 Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Mack Energy Corporation would like to Extend TA Status on the McIntyre A #4 for a period of one year to further study the economic value of producing this well.

1. Tested casing to 500# held OK.

Attached you will find the CIT chart.

TA Approved For 12 Month Period 2/6/2003

Accepted for record - NMOCD

14. I hereby certify that the foregoing is true and conject  Signed	Title	Production Analyst	Date	2/8/02	·
(This space for Federal or State office use)  Approved by (ORIG, SGD.) JOE G. FARA Conditions of approval, if any:	Title	Petroleum Fredman	Date	3/20/2002	

OCB-Artesia

CIST

Form 3160-5 (June 1990)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31,1993

5. Lease Designation and Serial No.

LC-054280 **SUNDRY NOTICES AND REPORTS ON WELLS** 6. If Indian, Allottee or Tribe Name Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT-" for such proposals 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE I Type of Well Well Well 8. Well Name and No. 2. Name of Operator McIntyre A Federal #4 Mack Energy Corporation 9. API Well No 3. Address and Telephone No 30-015-04222 (505)748-1288 10. Field and Pool, or Exploratory Area P.O. Box 960, Artesia, NM 88211-0960 4. Location of Well (Footage, Sec., T. R., M. or Survey Description) Loco Hills Abo 11. County or Parish, State 1650 FSL 410 FEL Sec. 20- T17S- R30E Eddy, NM CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Notice of Intent Change of Plans New Construction Recompletion Subsequent Report Plugging Back Non-Routine Fracturing Casing Repair Water Shut-Off Conversion to Injection Final Ahandonment Notice Altering Casing T&A Well Dispose Water (Note: Report results of multiple comple Completion or Recompletion Report and Log form.) 13 Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work )\* Mack Energy Corporation Temporarily Abandoned well as follows: 12/2000 1. Remove all down hole equipment. 2. Set CIBP at 6658'. 3. Test Casing to 500 # Held OK 1/22/2001 Mack Energy Corporation retested to 300 # held OK. Attached is a copy of the Chart. Mack Energy Corporation proposes to T&A this well for a period of one year to further study the economic value of producing this well. 777 Approved For 12 at the foregoing is true and /24/2001 Production Analyst Title Petroleum Engineer Title

### OCA - Artesia -

clsi

Form 3160-5 (June 1990)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31,1993

5. Lease Designation and Serial No.

6. If Indian, Allottee or Tribe Name

#### LC-054280

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT—" for such proposals

		<del></del>
SUBMIT IN	TRIPLICATE	7. If Unit or CA, Agreement Designation
I Type of Well		
Oil Gas Other		8. Well Name and No.
2. Name of Operator	, , , , , , , , , , , , , , , , , , , ,	McIntyre A Federal #4
Mack Energy Corporation		9. API Well No.
3. Address and Telephone No.	(505)748-1288	30-015-04222
P.O. Box 960, Artesia, NM 88211-0960		10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T. R., M. or Survey Description	ion)	Loco Hills Abo
1650 FSL 410 FEL	Sec 20 T17S R30E	11. County of Parish, State
		Eddy, NM
12 CHECK APPROPRIATE BOX(s) T	O INDICATE NATURE OF NOTICE, REPO	
TYPE OF SUBMISSION	TYPE OF ACTION	
Notice of Intent	Abandonment	Change of Plans
Subsequent Report	Recompletion	New Construction
Subsequent Report	☐ Plugging Back ☐ Casing Repair	Non-Routine Fracturing Water Shut-Off
Final Abandonment Notice	Altering Casing	Conversion to Injection
	Other T&A Well	Dispose Water
		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form)
2. Set CIBP at 6658'.		
		· ·
3. Test Casing to 500# Held OK		
3. Test Casing to 500# Held OK		
3. Test Casing to 500# Held OK  Mack Energy Corporation proposes to T&A this w	rell for a period of one year to further study the eco	nomic value of producing this well.
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Mack Energy Corporation proposes to T&A this w	172 1378 15 50 TT TO A ACCEPTED TO A ACCEPTE	
Mack Energy Corporation proposes to T&A this w  RELEIVE  OCD ART  14. I hereby certify that the foregoing is true and coffect  Signed	ED 30 Again Applied	12/14/00
Mack Energy Corporation proposes to T&A this w  RELEIVE  OCD ART  14. I hereby certify that the foregoing is true and corpect  Signed	ED 30 Again Applied	12/14/00
Mack Energy Corporation proposes to T&A this w  RELEIVE  OCD ART  14. I hereby certify that the foregoing is true and coffect  Signed	ED File Production Analyst	Date 12/14/00
Mack Energy Corporation proposes to T&A this w  RELEIVE  OCD ART  14. I hereby certify that the foregoing is true and corpect  Signed	ED File Production Analyst	Date 12/14/00

Form 3160-5 June 1990)

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR

M.M. Oil Cons. Di \*\*\*G.: 211 S. 1st \*\*\* 210-2834 \*\*

FORM APPROVED Budget Bureau No. 1004-0135

4	Expires: March 31,1993
Lea	se Designation and Serial No

BUREAU OF	LAND MANAGEMENT	5. Lease Designation and Serial No.
OUNDDY NOTICE	AND DEPORTS ON WELLS	LC-054280
	AND REPORTS ON WELLS	6. If Indian, Allottec or Tribe Name
	ill or to deepen or reentry to a different rese OR PERMIT—" for such proposals	rvoir.
OSC ALLEGATION C	TATE ET IVIT TOT SUCH PROPOSALS	
	TIN TRIPLICATE	7. If Unit or CA, Agreement Designation
I Type of Well Gas Gas		72/
Well Other	E 55 1891	8. Well Name and No.
2. Name of Operator	RECEIVED RECEIVED ARTESIA	McIntyre A Federal #4
Mack Energy Corporation	100 REU ARIES	9. API Well No.
3. Address and Telephone No.	(505)748-12	30-013-04222
P.O. Box 960, Artesia, NM 88211-0960  4. Location of Well (Footage, Sec., T. R., M. or Survey Do		<del>\( \frac{1}{1} \rangle \) \\ \( \frac{1}{1} \rangle \) \\\ \( \frac{1} \rangle \) \\\\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\</del>
4. Location of wen (Footage, Sec., 1. K., M. of Survey De	scription)	Loco Hills Abo
1650 FSL 410	FEL Sec 20 T17S R30E	11. County of Parish, State
		Eddy, NM
12. CHECK APPROPRIATE BOX	s) TO INDICATE NATURE OF NOTICE, F	
TYPE OF SUBMISSION	TYPE OF A	
	TTPE OF A	<u> </u>
Notice of Intent	Abandonment	Change of Plans
Subsequent Report	Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing Water Shut-Off
Final Abandonment Notice	Casing Repair Altering Casing	Conversion to Injection
Final Additionment Notice	Other Put on Pump	Dispose Water
		(Note: Report results of multiple completion on Well
13 Describe Proposed or Completed Operations (Clearly state all	pertinent details, and give pertinent dates, including estimated date	Completion or Recompletion Report and Log form.) of starting any proposed work. If well is directionally drilled
	cal depths for all markers and zones pertinent to this work )*	
07/15/97 RU Computalog & run bond log &	PND log. Wireline TD @ 6812'. Bottom 2' perfs	covered w/fill.
. 5		
: 00/07/07 DILDHI/C 1/08 DTTO . C 4 DTTO	0: J'	/DTTC 0. DHI/
	& acidize perfs w/2000 gals 15% NEFE. POH v	W/K115 & KIH W/liew 2 3/8 Prod. tog.
Land SN @ 6796' w/216 jts. TA 10 jts above	SN & MS 12 jts above SN.	
	·	
08/09/97 RIH w/2x1 1/2x16'HVR PAP. 2'x2	3/4" on pump. 10-7/8" 186-3/4" 75-7/8" on top.	2-2-4'x7/8" ponies. RD.
10/07/97 Install pumping unit. Put well on p	imp.	
	•	
•	ACCEPTED FOR RECO	00
	TIVAG LES SHEET	
	DEC 4 4 5007	/ St. GLASS
	DEC 1 1 1997	
14. I hereby certify that the foregoing is true and correct		7 1
1 min 1 to	Production Clerk	12/1/97
	Title Troduction Clerk	Date / O////
(This space for Federal or State office use)		
Approved by	Title	Date

CISF

UNITED STATES FORM APPROVED Form 3160-Budget Bureau No. 1004-0135 (June 1990) DEPARTMENT OF THE INTER Expires: March 31,1993 BUREAU OF LAND MANAGE 5. Lease Designation and Serial No. LC-054280 SUNDRY NOTICES AND REPO 6. If Indian, Allottee or Tribe Name Do not use this form for proposals to drill or to deepe Use "APPLICATION FOR PERMIT" 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPL I Type of Well Oil Well 8. Well Name and No. McIntyre A #4 Mack Energy Corporation 9. API Well No. 3. Address and Telephone No. 30-015-04222 10. Field and Pool, or Exploratory Area P.O. Box 960, Artesia, NM 88211-0960 4. Location of Well (Footage, Sec., T. R., M. or Survey Description) Loco Hills Abo 11. County or Parish, State Sec 20-T17S-R30E 1650 FSL & 410 FEI Eddy, NM CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Notice of Intent Change of Plans Abandonment Recompletion New Construction

Completion or Recompletion Report and Log form.)

13 Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drille give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Other

Plugging Back

Casing Repair

Altering Casing

The McIntyre A #4 was shut in on 8/24/95. Perforations are at 6712, 6716, 6732, 6746, 6748, 6750, & 6780-6814 ft. in the Loco Hills Abo.

Mack Energy proposes to recomplete the McIntyre A #4 in the Loco Hills Abo as follows:

RU pulling unit. RIH with 4 1/2" bit & scraper. Drill out CIBP at 6625'. Clean out hole to 6825'. TOH to run PND cased hole log from

Evaluate log and test for commercial production in the Loco Hills Abo.

Mack Energy requests a workover pit for the proposed work.

14. I hereby certify that the forefoing is tyle and correct

Signed

Title

Engineer

Title

Engineer

Title

Engineer

Approved by ORIG. SGD.) DAVID R. GLASS Conditions of approval, if any:

Subsequent Report

Final Abandonment Notice

PETROLEUM ENGINEER

Date JUN 1 1 1997

Non-Routine Fracturing

Conversion to Injection
Dispose Water

(Note: Report results of multiple completion on Well

Water Shut-Off



### UNITED STATES

FORM APPROVED get Bureau No. 1004-0135

ne 1990)		NT OF THE INTERIOR	Expires: March 31, 1993
	BUREAU OF	LAND MANAGEMENT	5. Lease Designation and Serial No.  LC 054280
Do not use	this form for proposals to d	S AND REPORTS ON WELLS irill or to deepen or reentry to a different reservoir. OR PERMIT—" for such proposals	6. If Indian, Allottee or Tribe Name
	SUBMI	T IN TRIPLICATE	7. If Unit or CA, Agreement Designation
1. Type of Well			1
Well [	Gas Well Other		8. Well Name and No.
2. Name of Open Enron	oil & Gas Company	v v v V	McIntyre A #4
3. Address and T	elephone No O. Box 2267, Midland	i. Texas 79702	10. Field and Pool, or Exploratory Area
	ell (Footage, Sec., T., R., M., or Survey I		Loco Hills Abo
	650' FSL & 410' FEL ec 20, T17S, R30E	Unit 1.	11. County or Parish, State  Eddy County, NM
12. CH	IECK APPROPRIATE BOX	s) TO INDICATE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TY	PE OF SUBMISSION	TYPE OF ACTION	
X	Notice of Intent	Abandonment Recompletion	Change of Plans New Construction
	Subsequent Report	Plugging Back  Casing Repair	Non-Routine Fracturing Water Shut-Off
· .	Final Abandonment Notice	Altering Casing Other	Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well
		If pertinent details, and give pertinent dates, including estimated date of starting call depths for all markers and zones pertinent to this work.)*	Completion or Recompletion Report and Log form.1  any proposed work. If well is directionally drilled.
Rive 20020	Marce locations and themselven and true Activ	as deputs for all markers and zones perment to this work,	
			AC NO
			GT C IN
Se	ee attached P&A proced	lure	<u> </u>
		MEC 12 101	
		SEL .	en jed en jed en jed en jed
			ي الم
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14. I hereby certify Signo Letter	that the foregoing is true and correct  Betty G	ildon Tide Regulatory Analyst	
•	Pederal or State office uses (ORIG. SGD.) JOE G.	LARA Tide PETROLEUM ENGINEER	1210/04
Approved by Conditions of ap		. 1	Date

### Enron Oil & Gas Company

McIntyre A #4 1650 FSL 410 FEL Sec 20 T17S R30E Eddy County, New Mexico

#### Plugging Procedure

#### Current well bore diagram attached:

- 1. MIRU pulling unit POH with rods and pump
- 2. Install BOP POH with 2-3/8 tubing
- 3. RU wireline RIH with 4-1/2 CIBP to 6750. Set CIBP
- 4. Dump 5 sx cement on top of CIBP (Approx 40 ft)
- 5. Spot 20 sx plug 4365 4215
- 6. Tag top of plug
- 7. Spot 20 sx plug 3095 2945
- 8. Tag top of plug
- 9. Spot 20 sx plug 1935 1785
- 10. Tag top of plug
- 11. Spot 15 sx plug 100 feet to surface
- 12. Move out equipment clean location

Enron Oil & Gas Co.
McIntyre A # 4
1650 FSL 410 FEL
Sec 20 T17S R30E
Eddy County, New Mexico

KB 3644 DF 3642 GL 3630

8-5/8 24# J-55 set @ 1860 Cemented to surface

with 500 sx

Abo perfs 6780 - 6814

Formation tops: Yates 1215 Queen 2184 San Andres 3095 Glorietta 4365 Abo 6275 Abo Reef 6488 5-1/2 15.5# J-55 casing set @ 6857
Cemented to surface with 700 sx

TD 6857

Bradenhead piped to surface wi Inspected and approved on 3-19  3. Thereby certify that the information above is true and compact of the configuration of the	-79 by James Brasfield,	U.S.G.S	DAYE 4-4-79	
Inspected and approved on 3-19	-79 by James Brasfield,	U.S.G.S	y N.M.O.C.C.	
Bradenhead piped to surface wi Inspected and approved on 3-19	th 2" pipe and 2 valves 2-79 by James Brasfield,	as ordered by U.S.G.S	y N.M.O.C.C	
Bradenhead piped to surface wi Inspected and approved on 3-19	th 2" pipe and 2 valves 2-79 by James Brasfield,	as ordered by U.S.G.S	y N.M.O.C.C	
Bradenhead piped to surface wi Inspected and approved on 3-19	th 2" pipe and 2 valves 2-79 by James Brasfield,	as ordered by U.S.G.S	y N.M.O.C.C	
Bradenhead piped to surface wi Inspected and approved on 3-19	tn 2" pipe and 2 valves 2-79 by James Brasfield,	as ordered by U.S.G.S	y N.M.O.C.C	
Bradenhead piped to surface wi Inspected and approved on 3-19	tn 2" pipe and 2 valves 2-79 by James Brasfield,	as ordered by U.S.G.S	y N.M.O.C.C.	
Bradenhead piped to surface wi Inspected and approved on 3-19	tn 2" pipe and 2 valves 2-79 by James Brasfield,	as ordered by U.S.G.S	y N.M.O.C.C	
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Bradenhead piped to surface wi Inspected and approved on 3-19	tn 2" pipe and 2 valves 2-79 by James Brasfield,	as ordered by U.S.G.S	y N.M.O.C.C	
Bradenhead piped to surface wi Inspected and approved on 3-19	tn z pipe and 2 valves -79 by James Brasfield,	as ordered by U.S.G.S	y N.M.O.C.C	
Bradenhead piped to surface wi Inspected and approved on 3-19	th z pipe and 2 valves 2-79 by James Brasfield,	as ordered by U.S.G.S	y N.M.O.C.C.	
	11 04 1 1 2 -		•	
7. Describe Proposed or Completed Operations (Clearly state work) SEE RULE 1103.	e all pertinent details, and give pertin	ent dates, including	estimated date of startin	g any proposed
Casing Leak Survey	X			
	OTHER Cast	ing Leak Surv	ey	X
PULL OR ALTER CASING CHARGE	COMMENCE DRILLING CASING TEST AND C	. ==	PEUG AND AB	LHOONMENT
PERFORM REMEDIAL WORK	AND ABANDON REMEDIAL WORK		ALTERING CA	51NG
NOTICE OF INTENTION TO:		-	REPORT OF:	
Check Appropriate Box	To Indicate Nature of Notice	e, Report or Otl		77777777
	ton (Show whether DF, RT, GR, etc.) 3630 GL		12. County Eddy	
THE east LINE, SECTION 20	CWHSHIP 175 RANGE	30E RMPM.		
	THE SOUTH LINE AND	101 FEET FROM	Loco Hills Ab	
4. Lecation of Well	**************************************		10. Field and Fool, or	
Box 726, Artesia, N.M. 88210	U. L ARTESIA	OFFICE	9. Well No.	
Holly Energy Inc.		·	McIntyre A	
OIL MAN GAS WILL OTHER-	APR -	8 1979	6. Farm or Louse Ham	2
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SUSPRY HOTICES AND	PEPORTS ON WELLS	·	Federal IC 05	4280 1777:1777
OPTINATOR /			5. State OH & Gun Lee	ase No.
·		,	State State	raly)
LAND OFFICE	· · · · · · · · · · · · · · · · · · ·		Effective 1-1-65	
LAND OFFICE	EXTEC OF CORSERVATION COM	MISSION ,		
LAND OFFICE	EXICO OIL CONSERVATION COM	MISSION S	Supersedex Old C-102 and C-103	,

ORDITIONS OF APPROVAL, IF ANYE

LICATE\*

Form approved. Budget Bureau No. 42-R1424. 5. LEASE DESIGNATION AND SERIAL NO.

LC: 054280

(May	

DEPARTMENT OF THE INTERIOR (Other Instructions verse side)

GEOLOGICAL SURVEY

4. PERMIT NO. 15. ELEVATIONS (Show whether DF, RT, GR, etc.)	12. COUNTY OR PARISH 13. STATE
1650' FSL & 410' FEL Sec. 20-175-30E	11. SEC., E. B., M., OR RIK. AND SHEVEN OR AREA Sec. 20, T. 17 S.,
LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface	10. FEELD AND POOL, OR WILDGAT
P. 0. Box 1090, Roswell, New Maxico 88201	<b>4</b> 7
FRANKLIN, ASTON & FAIR, INC.	McIntyre A
NAME OF OPERATOR	8. FARM OR LEASE NAME
OIL GAS CAS WELL OTHER	7. UNIT AGREEMENT NAME

NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF: TEST WATER SHUT-OFF PULL OR ALTER CASING WATER SHUT-OFF REPAIRING WELL FRACTURE TREAT MULTIPLE COMPLETE FRACTURE TREATMENT ALTERING CARING SHOOTING OR ACIDIZING ABANDONMENT\* SHOOT OR ACIDIZE ABANDON\* CHANGE PLANS (NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

On August 19, 1968 we perforated one shot per foot at 6712', 6716', 6732', 6746'; 6748', 6750' and acidized with 2500 gallons Super X acid followed by 3000 gallons Before treatment production was 20 BOPD and 35 BMPD. After treatment production increased to 45 BOPD and 55 BMPD pumping.

#### RECEIVED

SEP 2 4 1968

9. C. C. ARTÉSIA, OFFICE

18. I hereby certify that the foregoing is true and correct					
SIGNED Grant My Smith	TITLE Geologist	DATE 9/20/66	<u> </u>		
(This space for Federal or State office use)			•		
APPROVED FILE	TITLE	DATE	·		
APPROVED OF APPROVAL, IM ANY:			·. ·.		

\*See Instructions on Reverse Side

ACTING METRICT ENCINEER

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SERIAL NUMBER LA 054240

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OF THE INTERIOR

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### NE' 1EXICO OIL CONSERVATION COM SION E E E I V Rombe-104) Santa Fe, New Mexico

### REQUEST FOR (OIL) - (GAS) ALLOWABLEEE 2 8 15 New Well Recompletion

This form shall be submitted by the operator before an initial allowable will be assigned to any completed Gil or Gas well. Form C-104 is to be submitted in QUADRUPLICATE to the same District Office to which Form C-104 was sent. The allowable will be assigned effective 7:00 A.M. on date of completion or recompletion, provided this form is filed during calendar month of completion or recompletion. The completion date shall be that date in the case of an oil well when now oil is delivered into the stock tanks. Gas must be reported on 15.025 psia at 60° Fahrenheit.

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						(Place)		· · ·	(Date)	
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8-5/6		<b>860</b>	550	Cloke Size	metrioo	of Testing:				
5-1/2	e 6	857	750	Acid or Frac	cture Treatment	(Give amounts of	f materials used,	such as acid,	water, oil, a	nd
				sand) 1	· · · · · · · · · · · · · · · · · · ·					
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			•			P. 0	. Box 769, R	Gewall, M	in Harias	$\lambda$

API #: 30-015-30292

IC# 300157022198

Status: Active

Type: Oil

Surface:

2310 FNL

990 FEL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE W D 'C'

Well #: 6

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4865 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: W D MCINTYRE C 006

GO-TECH - Plug Date:

Depth Base: 451 Cement Amount:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 13 3/8 IN CASING Size: 8 5/8 IN

450 sx 600 sx Top of Cement: Circ

Depth Base: 1047

Cement Amount:

Top of Cement: Circ to Pit

CASING Size: 5 1/2 IN

Cement Amount:

920 sx Top of Cement: Circ

Depth Base: 4838

TUBING Size: 27/8 IN

Depth Base: 4797

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4368 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top:

4368 Depth Base:

4760

API #: 30-015-30293

IC# 300157022098

Status: Active

Type: Oil

Surface:

1650 FSL 2310 FEL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE 'A'

Well #: 13

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

Depth Total Logger: 4935

Depth True Vertical:

Formation at TD: YESO

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

Producing Formation: PADDOCK

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

GO-TECH - Well Name: MCINTYRE A WEST 013

CASING Size: 13 3/8 IN

Depth Base: 426 Cement Amount: 525 sx Top of Cement: Circ to Pit

CASING Size: 8 5/8 IN

Depth Base: 1049 Cement Amount: 600 sx Top of Cement: Circ to Pit

CASING Size: 5 1/2 IN

Depth Base: 4920

Cement Amount:

955 sx

Top of Cement: Circ

TUBING Size: 27/8 IN

4892 Depth Base:

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4422 Depth Base: 4875

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4422 Depth Base:

UWI: 30015306650000 API #: 30-015-30665 , IC # Status: Active Type: Oil Surface: 990 FWL Section: 20 Township 17 South Range 30 East Eddy County New Mexico 330 FNL Bottom Hole: Section: Operator: MACK ENERGY CORP Lease Name: JENKINS B FEDERAL Well #: 11 Field: GRAYBURG JACK Geologic Province: PERMIAN BASIN Depth Total Driller: Depth Total Logger: 4710 Depth True Vertical: Formation at TD: PADDOCK Producing Formation: SAN ANDRES Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: JENKINS B FEDERAL 011 GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool Name: LOCO HILLS; PADDOCK CASING Size: 13 3/8 IN Depth Base: 450 Cement Amount: 425 sx Top of Cement: Circ CASING Size: 8 5/8 IN Depth Base: 1042 Cement Amount: 475 sx Top of Cement: Circ CASING Depth Base: 4694 Size: 5 1/2 IN Cement Amount: Top of Cement: Circ 890 sx TUBING Size: 27/8 IN Depth Base: 4193 Cement Amount: Top of Cement: SX TUBING Size: 27/8 IN Depth Base: 4681 Cement Amount: Top of Cement: Test\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top: **PADDOCK** Depth Top: 4259 Depth Base: 4632 Type: INITIAL POTENTIAL #: 3 Formation Top: Depth Top: SAN ANDRES 3013 Depth Base: 4632 Type: PRODUCTION TEST #: 1 Formation Top: SAN ANDRES 3341 Depth Top: Depth Base: 3561 Type: PRODUCTION TEST #: 2 Formation Top: SAN ANDRES 3013 Depth Top: Depth Base: 3227 Test\_Perf\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4259 Depth Base: 4632 Type: INITIAL POTENTIAL #: 3 Formation Top Depth Base: 4259 4632 Depth Top: Type: INITIAL POTENTIAL #: 3 Formation Top 3561 Depth Top: 3013 Depth Base: Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 3341 Depth Base: 3561

Depth Top:

3013 Depth Base:

3227

Type: PRODUCTION TEST

#: 2 Formation Top

API #: 30-015-30668

IC# 300157011199

Status: Active

Type: Oil

Surface:

2310 FWL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: JENKINS 'B' FEDERA '

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4744 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK-

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: JENKINS B FEDERAL 010

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 13 3/8 IN

Depth Base: 417 Cement Amount: 400 sx

Top of Cement: Circ to Pit

CASING Size: 8 5/8 IN

Depth Base: 1037 Cement Amount:

475 sx Top of Cement: Circ

CASING Size: 5 1/2 IN

Depth Base: 4714 Cement Amount: 1000 sx Top of Cement: Circ

TUBING Size: 27/8 IN

Depth Base: 4685

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4418 Depth Base: 4666

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4418 Depth Base:

API #: 30-015-30679

IC# 300157010499

Status: Active

Type: Oil

Surface:

990 FSL

990 FWL

17 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section: Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE 'DK' FEDE

Well #: 13

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

Depth Total Logger: 4668

Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

GO-TECH - Well Name: MCINTYRE DK FEDERAL 013

Cement Amount: Depth Base: 364

325 sx Top of Cement: Circ

CASING Size: 13 3/8 IN CASING Size: 85/8 IN

Depth Base: 1033 Cement Amount:

525 sx

Top of Cement: Circ

CASING Size: 5 1/2 IN

Depth Base: 4663

Top of Cement: Circ

Cement Amount: Cement Amount: 860 sx

Top of Cement:

TUBING Size: 27/8 IN

Depth Base: 4594

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4279 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top:

4279 Depth Base:

API #: 30-015-30698

IC# 300157010599

Status: Active

Type: Oil

Surface:

1575 FEL

Section: 17 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: RED FEDERAL

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4765 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK

GO-TECH - Operator: MARBOB ENERGY CORP

Date of Abandonment:

GO-TECH - Well Name: RED FEDERAL 004

Producing Formation: PADDOCK

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

424 Cement Amount:

300 sx Top of Cement: Ready Mix to Cella

CASING Size: 8 5/8 IN CASING Size: 5 1/2 IN

Depth Base:

Cement Amount:

Top of Cement: Circ to Surf

Depth Base: 4765 1300 sx

TUBING Size: 27/8 IN

Depth Base: 4239 Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL #: 1 Formation Top: PADDOCK

Depth Top: 4293 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4293 Depth Base:

API #: 30-015-30731

IC# 300157014199

Status: Active

18 Township 17 South Range 30 East Eddy County New Mexico

Type: Oil

Surface:

Bottom Hole:

660 FSL

Operator: MARBOB ENERGY CORP

1295 FEL

Section:

Section:

Lease Name: BURCH KEELY UNIT

Well #: 297

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4730 Depth Total Logger: Depth True Vertical:

Formation at TD: GLORIETA

Producing Formation: GLORIETA

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: BURCH KEELY UNIT 297

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA Depth Base: 433 Cement Amount:

CASING Size: 8 5/8 IN CASING Size: 5 1/2 IN

Depth Base: 4730 Cement Amount:

Top of Cement: Circ to Surf 1300 sx Top of Cement: Circ to Surf

TUBING Size: 27/8 IN

Depth Base: 4193

Cement Amount:

Top of Cement:

Test Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: GLORIETA

Depth Top: 4239 Depth Base: 4551

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top:

4239 Depth Base:

UWI: 30015307720000 API #: 30-015-30772 Status: Active 990 FSL Section: 17 Township 17 South Range 30 East Eddy County New Mexico Surface: 315 FEL Bottom Hole: Section: Operator: COG OPERATING LLC Lease Name: MCINTYRE DK FEDER Field: GRAYBURG JACK Geologic Province: PERMIAN BASIN Depth Total Driller: 4750 Depth Total Logger: Depth True Vertical: Formation at TD: PADDOCK Producing Formation: SAN ANDRES Date of Abandonment: GO-TECH - Well Name: MCINTYRE DK FEDERAL 012Y GO-TECH - Operator: COG OPERATING LLC GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK CASING Size: 133/8 IN 425 sx Depth Base: 424 Cement Amount: Top of Cement: Circ to Pit CASING Size: 8 5/8 IN Depth Base: 1117 Cement Amount: 850 sx Top of Cement: Circ to Pit CASING Size: 5 1/2 IN Depth Base: 4711 Cement Amount: 1000 sx Top of Cement: Circ to Pit TUBING Size: 27/8 IN Depth Base: 4582 Cement Amount: Top of Cement: TUBING Size: 27/8 IN Depth Base: 4676 Cement Amount: Top of Cement: sx Test\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top: SAN ANDRES Depth Top: 2985 Depth Base: Type: INITIAL POTENTIAL #: 1 Formation Top: PADDOCK Depth Top: 4380 Depth Base: Test\_Perf\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4380 Depth Base:

#: 1 Formation Top

#: 1 Formation Top

#: 1 Formation Top

#: 1 Formation Top

Type: INITIAL POTENTIAL

Type: INITIAL POTENTIAL

Type: INITIAL POTENTIAL

Type: INITIAL POTENTIAL

Type: Oil

12

4669

4669

4118

3552

3213

4669

3734 Depth Base:

Depth Base:

Depth Base:

Depth Base:

3360

2985

4380

Depth Top:

Depth Top:

Depth Top:

Depth Top:

Well #:

API #: 30-015-30789

IC# 300157018699

Status: Active

Type: Oil

Surface:

2360 FSL

330 FEL Section:

18 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: BURCH KEELY UNIT

303

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

Depth Total Logger: 4703

Depth True Vertical:

Formation at TD: SAN ANDRES

Producing Formation: SAN ANDRES

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: BURCH KEELY UNIT 303

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

CASING Size: 8 5/8 IN

Depth Base: 406

Cement Amount: 300 sx Top of Cement: Circ to Surf

CASING Size: 5 1/2 IN

Depth Base: 4703

Cement Amount:

1350 sx

Top of Cement: Circ to Surf

TUBING Size: 27/8 IN

Depth Base: 4136

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: SAN ANDRES

Depth Top: 4206 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4206 Depth Base: 4494

API#: 30-015-30792

Status: Active

Surface:

1650 FSL

990 FEL

Section: 17 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: RED FEDERAL

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4740 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

Producing Formation: PADDOCK

GO-TECH - Well Name: RED FEDERAL 001

GO-TECH - Plug Date:

Depth Base: 394 300 sx

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 8,5/8 IN

Cement Amount: 1300 sx Top of Cement: Circ to Surf

CASING Size: 5 1/2 IN

Depth Base: 4740

Cement Amount: Cement Amount: Top of Cement: Circ to Surf

TUBING Size: 27/8 IN

Depth Base: 4256 Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4306 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

4306 Depth Base: Depth Top:

4573

UWI: 30015309810000 API #: 30-015-30981 IC# Status: Active Type: Oil Surface: 330 FSL 2310 FEL Section: 17 Township 17 South Range 30 East Eddy County New Mexico Bottom Hole: Section: Operator: COG OPERATING LLC Lease Name: MCINTYRE DK FEDER Well #: 11 Field: GRAYBURG JACK Geologic Province: PERMIAN BASIN Depth Total Driller: 4746 Depth Total Logger: Depth True Vertical: Formation at TD: PADDOCK Producing Formation: GRAYBURG-SA Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: MCINTYRE DK FEDERAL 011 GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK CASING Size: 13 3/8 IN Depth Base: Cement Amount: Top of Cement: Circ 456 450 sx CASING Size: 8 5/8 IN Depth Base: 1042 Top of Cement: Circ Cement Amount: 475 sx CASING Size: 5 1/2 IN Depth Base: 4737 Cement Amount: 980 sx Top of Cement: Circ TUBING Size: 27/8 IN Depth Base: 4627 Cement Amount: Top of Cement: TUBING Size: 27/8 IN Depth Base: 4632 Cement Amount: Top of Cement: SX Test\_Report: Type: INITIAL POTENTIAL **GRAYBURG-SAN** #: 1 Formation Top: Depth Top: 2978 Depth Base: ANDRES Type: INITIAL POTENTIAL #: 1 Formation Top: PADDOCK 4216 Depth Base: 4600 Depth Top: Type: INITIAL POTENTIAL #: 2 Formation Top: **PADDOCK** Depth Top: 4216 Depth Base: 4600 Test\_Perf\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 3956 Depth Base: 4077 Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 3317 Depth Base: 3451 Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 2978 Depth Base: 3222 Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4216 Depth Base: 4600

Depth Top:

4216 Depth Base:

4600

Type: INITIAL POTENTIAL

#: 2 Formation Top

API #: 30-015-31071

IC# 3001577795200

Status: Active

Type: Oil

Surface:

1615 FSL

1065 FEL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE 'A' FEDER

Well #: 11

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4970 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK

GO-TECH - Operator: COG OPERATING LLC

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Well Name: MCINTRYE A EAST 011

GO-TECH - Plug Date:

Depth Base: 454 Cement Amount:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK 450 sx Top of Cement: Circ

CASING Size: 13 3/8 IN CASING Size: 8 5/8 IN

Depth Base: 1120 500 sx

Top of Cement: Circ

Depth Top: 4452 Depth Base:

Cement Amount:

CASING Size: 5 1/2 IN

Depth Base: 4961

Cement Amount: Depth Base: 4922 Cement Amount:

Top of Cement: Circ 1100 sx

TUBING Size: 27/8 IN

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Top of Cement:

Test\_Perf\_Report: Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4452 Depth Base: 4899

API #: 30-015-31330

Status: Active

Type: Oil

Surface:

1650 FSL

380 FWL Section: 17 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: BIRDIE FEDERAL

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4772 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Plug Date:

GO-TECH - Well Name: BIRDIE FEDERAL 001

421

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 8 5/8 IN CASING Size: 5 1/2 IN Depth Base: Depth Base: 4772

Cement Amount: Cement Amount:  $300 \, sx$ 

Top of Cement: Circ to Surf

1150 sx

Top of Cement: Circ to Surf

TUBING Size: 2.7/8 IN

Depth Base: 4201

Cement Amount:

SX

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4245 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4245 Depth Base:

4532

API #: 30-015-31481

IC# 3001574341200

Status: Active

Surface:

2415 FSL

844 FEL

Section:

20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE 'A' FEDER

Well #:

Field: LOCO HILLS

Depth Total Logger:

Geologic Province: PERMIAN BASIN

Depth Total Driller:

5141

Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: MCINTRYE A EAST 014

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

GO-TECH - Plug Date:

Depth Base: 428 Cement Amount: 450 sx

Top of Cement: Ready Mix to Surf

CASING Size: 13 3/8 IN CASING Size: 8 5/8 IN

Depth Base: 1219 Cement Amount:

650 sx

Top of Cement: Circ to Pit

CASING Size: 5 1/2 IN

Depth Base: 5110 700 sx

Top of Cement: Circ

Cement Amount:

TUBING Size: 27/8 IN

Depth Base: 4362

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4421 Depth Base:

4919

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top:

4421 Depth Base:

API #: 30-015-31559

3001579515200

Status: Active

Type: Oil

Surface:

2310 FNL 2310 FWL

Section:

4900

20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: JENKINS 'B' FEDERA

Well #: 12

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

Depth Total Logger:

Depth True Vertical:

Formation at TD: PADDOCK

GO-TECH - Operator: COG OPERATING LLC

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Plug Date:

GO-TECH - Well Name: JENKINS B FEDERAL 012

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 13 3/8 IN

Depth Base: 427

Cement Amount:

450 sx Top of Cement: Circ to Pit 600 sx

CASING Size: 8 5/8 IN

Depth Base: 1098 Cement Amount: Cement Amount: Top of Cement: Ready Mix to Surf

CASING Size: 5 1/2 IN

Depth Base: 4866

1050 sx Top of Cement: Circ to Pit Top of Cement:

TUBING Size: 27/8 IN Depth Base: 4781 Cement Amount:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4321 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4321 Depth Base:

UWI: 30015315600000 API #: 30-015-31560 Status: Active Type: Oil Surface: 2310 FNL 880 FWL Section: 20 Township 17 South Range 30 East Eddy County New Mexico Bottom Hole: Section: Operator: MACK ENERGY CORP Lease Name: JENKINS B FEDERAL Well #: 13 Field: GRAYBURG JACK Geologic Province: PERMIAN BASIN Depth Total Driller; 4880 Depth Total Logger: Depth True Vertical: Formation at TD: PADDOCK Producing Formation: SAN ANDRES Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: JENKINS B FEDERAL 013 GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK Depth Base: CASING Size: 13 3/8 IN 465 450 sx Cement Amount: Top of Cement: Circ CASING Size: 8 5/8 IN Depth Base: 1090 Cement Amount: 600 sx Top of Cement: Circ CASING Size: 5 1/2 IN Depth Base: 4874 Cement Amount: 710 sx Top of Cement: Circ TUBING Size: 27/8 IN Depth Base: 4741 Cement Amount: sx Top of Cement: TUBING Size: 27/8 IN Depth Base: 4741 Cement Amount: Top of Cement: Test\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top: PADDOCK Depth Top: 4312 Depth Base: Type: INITIAL POTENTIAL #: 4 Formation Top: SAN ANDRES Depth Top: 3106 Depth Base: 4716 Type: PRODUCTION TEST #: 1 Formation Top: Depth Top: 3912 Depth Base: 3928 SAN ANDRES Type: PRODUCTION TEST #: 2 Formation Top: SAN ANDRES Depth Top: 3402 Depth Base: 3595 Type: PRODUCTION TEST #: 3 Formation Top: SAN ANDRES Depth Top: 3106 Depth Base: 3296 Test\_Perf\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4312 Depth Base: 4716 Type: INITIAL POTENTIAL 4716 #: 4 Formation Top Depth Top: 4312 Depth Base: Type: INITIAL POTENTIAL #: 4 Formation Top Depth Top: 3106 Depth Base: 3928 Type: PRODUCTION TEST #: 1 Formation Top 3928 Depth Top: 3912 Depth Base: Type: PRODUCTION TEST #: 2 Formation Top Depth Top: 3402 Depth Base: 3595

Depth Top: 3106 Depth Base:

3296

Type: PRODUCTION TEST

#: 3 Formation Top

API #: 30-015-31561

Status: Active

Type: Oil

Surface:

330 FSL

330 FWL Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE 'B'

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

5017 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: MCINTYRE B 007

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK Depth Base: 436 Cement Amount:

450 sx

Top of Cement: Circ

CASING Size: 13 3/8 IN CASING Size: 8 5/8 IN

Depth Base: 1049 550 sx

Top of Cement: Ready Mix to Surf

CASING Size: 5 1/2 IN

Depth Base: 5012

Cement Amount: Cement Amount:

1110 sx

Top of Cement: Circ

Depth Top: 4464 Depth Base:

TUBING Size: 27/8 IN

Depth Base: 4694

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

4679

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4464 Depth Base:

API #: 30-015-31562

IC# 3001579521200

Status: Active

Surface:

990 FSL

990 FWL Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE 'B'

Geologic Province: PERMIAN BASIN

Well #: 8

Field: LOCO HILLS Depth Total Driller:

4884

Depth True Vertical:

Formation at TD: PADDOCK

Depth Total Logger:

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

Producing Formation: PADDOCK

GO-TECH - Well Name: MCINTYRE B 008

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 13 3/8 IN

Depth Base:

411 Cement Amount:

Top of Cement: Circ 450 sx

CASING Size: 8 5/8 IN

Depth Base: 1088

Cement Amount:

600 sx Top of Cement: Ready Mix to Surf

CASING Size: 5 1/2 IN

Depth Base: 4867

Cement Amount:

875 sx Top of Cement:

TUBING Size: 27/8 IN

Depth Base: 4739

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4436 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4435 Depth Base:

UWI: 30015315630000 Type: Oil API#: 30-015-31563 Status: Active Surface: 2310 FNI 455 FEL Section: 20 Township 17 South Range 30 East Eddy County New Mexico Bottom Hole: Section: Operator: MACK ENERGY CORP Lease Name: MCINTYRE W D 'C' Well #: 7 Field: GRAYBURG JACK Geologic Province: PERMIAN BASIN Depth Total Driller: 5037 Depth Total Logger: Depth True Vertical: Formation at TD: PADDOCK Producing Formation: SAN ANDRES Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: W D MCINTYRE C 007 GO-TECH - Plug Date: GO-TECH - One\_Producing Pool Name: LOCO HILLS: PADDOCK CASING Size: 13 3/8 IN Depth Base: 410 Cement Amount: 450 sx Top of Cement: Circ to Pit CASING Size: 8 5/8 IN Depth Base: 1101 Cement Amount: 600 sx Top of Cement: CASING Size: 5 1/2 IN Depth Base: 5029 Cement Amount: 840 sx Top of Cement: Circ to Pit TUBING Size: 27/8 IN Depth Base: 4849 Cement Amount: Top of Cement: sx TUBING Size: 27/8 IN Depth Base: 4851 Cement Amount: Top of Cement: sx Test\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top: PADDOCK Depth Top: 4394 Depth Base: Type: INITIAL POTENTIAL Depth Base: #: 5 Formation Top: SAN ANDRES 4831 Depth Top: 3132 Type: PRODUCTION TEST #: 1 Formation Top: SAN ANDRES Depth Top: 4024 Depth Base: 4050 Type: PRODUCTION TEST #: 2 Formation Top: SAN ANDRES Depth Top: 3925 Depth Base: 3968 Type: PRODUCTION TEST #: 3 Formation Top: SAN ANDRES Depth Top: 3436 Depth Base: 3580 Type: PRODUCTION TEST #: 4 Formation Top: SAN ANDRES Depth Top: 3132 Depth Base: 3348 Test\_Perf\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4394 Depth Base: 4831 Type: INITIAL POTENTIAL #: 5 Formation Top Depth Top: 4394 Depth Base: 4831 Type: INITIAL POTENTIAL #: 5 Formation Top Depth Top: 3132 Depth Base: 4050 Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 4024 Depth Base: 4050 Type: PRODUCTION TEST #: 2 Formation Top Depth Top: 3925 Depth Base: 3968 Type: PRODUCTION TEST #: 3 Formation Top Depth Top: Depth Base: 3580 3436

Depth Top:

3132 Depth Base:

3348

Type: PRODUCTION TEST

#: 4 Formation Top

API #: 30-015-31564

IC# 3001579518200 Status: Active

Type: Oil

Surface:

990 FSL

1650 FWL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE W D `E`

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

5801 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: W D MCINTYRE E 006

GO-TECH - Plug Date:

Depth Base: 417 Cement Amount: 450 sx

Top of Cement: Circ

CASING Size: 13 3/8 IN CASING Size: 8 5/8 IN

Depth Base: 1097 Cement Amount: 550 sx

Top of Cement: Circ to Pit

Depth Top: 4456 Depth Base:

CASING Size: 5 1/2 IN

Depth Base: 5790 Cement Amount:

1750 sx

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

Top of Cement:

TUBING Size: 27/8 IN

Depth Base: 4732

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4456 Depth Base:

API #: 30-015-31786

IC# 3001571657200

Status: Active

Type: Oil

Surface:

1650 FWL Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE W D 'E'

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

5020 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: W D MCINTYRE E 007

GO-TECH - Plug Date:

Depth Base: 417 Cement Amount:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 13 3/8 IN CASING Size: 8 5/8 IN

Depth Base: 1206 Cement Amount: 425 sx Top of Cement: Circ

Top of Cement: Circ

CASING Size: 5 1/2 IN

625 sx 970 sx

Depth Top: 4489 Depth Base:

TUBING Size: 27/8 IN

Depth Base: 5019 Depth Base: 4686

Cement Amount:

Top of Cement: Circ

Test Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Cement Amount:

Top of Cement: -

Test\_Perf\_Report: Type: INITIAL POTENTIAL.

#: 1 Formation Top

Depth Top: 4489 Depth Base:

4678

API #: 30-015-31787

IC# 3001571822200

Status: Active

Surface:

2250 FWL Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE W D 'E'

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

5020 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: W D MCINTYRE E 008

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 13 3/8 IN

Depth Base: 425 Cement Amount: 450 sx

Top of Cement: Ready Mix to Surf

CASING Size: 8 5/8 IN

Depth Base: 1224 Cement Amount:

625 sx Top of Cement: Circ

CASING Size: 5 1/2 IN

Depth Base: 4967

Cement Amount:

1030 sx Top of Cement: Circ

TUBING Size: 27/8 IN

Depth Base: 4879

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4415 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4415 Depth Base:

API #: 30-015-31788

IC# 3001571910200

Status: Active

Surface:

1650 FSL

1100 FWL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE 'B'

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4980

Depth Total Logger:

Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

GO-TECH - Well Name: MCINTYRE B 009

Depth Base: 430 Cement Amount:

425 sx

Top of Cement: Circ

CASING Size: 13 3/8 IN CASING Size: 85/8 IN

Depth Base: 1230 Depth Base: 4973 Cement Amount: Cement Amount:

625 sx Top of Cement: Circ 950 sx Top of Cement: Circ

CASING Size: 5 1/2 IN

Depth Base: 4862

Cement Amount:

TUBING Size: 27/8 IN

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4302 Depth Base:

4845

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4302 Depth Base:

API #: 30-015-31789

IC# 3001572045200

Status: Active

Type: Oil

Surface:

1775 FSL

1625 FEL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE 'A'

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

5050

Depth Total Logger:

Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Plug Date:

GO-TECH - Well Name: MCINTYRE A WEST 017

Depth Base: 422 Cement Amount:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 13 3/8 IN CASING Size: 8 5/8 IN

Depth Base:

1231 Cement Amount: 450 sx Top of Cement: Circ

CASING Size: 5 1/2 IN

Depth Base:

5029 Cement Amount: 625 sx Top of Cement: Circ 975 sx Top of Cement: Circ

Depth Base:

TUBING Size: 27/8 IN

4898 Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4441 Depth Base:

4871

Test\_Perl\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4441 Depth Base:

API #: 30-015-31855

IC# 3001571550200

Status: Active

Surface:

2160 FEL 330 FSL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE 'A'

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

6210 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

Producing Formation: PADDOCK

GO-TECH - Well Name: MCINTYRE A WEST 016

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 13 3/8 IN

Depth Base: 435 Cement Amount: 450 sx Top of Cement: Ready Mix to Surf

CASING Size: 8 5/8 IN

Depth Base: 1217

Cement Amount:

625 sx

Depth Base: 6204

Top of Cement: Circ

CASING Size: 5 1/2 IN

Cement Amount:

1305 sx

Top of Cement: Circ

TUBING Size: 27/8 IN

Depth Base: 4722

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4568 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL #: 1 Formation Top

Depth Top: 4568 Depth Base:

API #: 30-015-32187

IC# 3001579885200

Status: Active

Type: Oil

Surface:

2210 FWL Section:

20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE W D 'E'

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

Depth Total Logger: 4810

4814

Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

Cement Amount:

GO-TECH - Well Name: W D MCINTYRE E 009

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: .13 3/8 IN

Depth Base: Cement Amount: 450 sx

Top of Cement: Circ

Depth Top: 4499 Depth Base:

CASING Size: 8 5/8 IN

Depth Base: 1182

600 sx 965 sx Top of Cement: Circ Top of Cement: Circ

CASING Size: 5 1/2 IN

Depth Base: 4802

Cement Amount:

TUBING Size: 27/8 IN

Depth Base: 4728

Cement Amount:

Top of Cement:

Test\_Report:

\_ Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4499 Depth Base:

API #: 30-015-32188

IC# 3001579887200

Status: Active

Surface:

2310 FEL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE 'A'

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4836 Depth Total Logger:

Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: MCINTYRE A WEST 018

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 13 3/8 IN CASING Size: 8 5/8 IN

Depth Base: 425 Cement Amount: 450 sx

Top of Cement: Circ

Depth Base: 1215 Cement Amount: 800 sx

Top of Cement: Circ

CASING Size: 5 1/2 IN

Depth Base: 4826 'Cement Amount:

900 sx

Top of Cement:

TUBING Size: 27/8 IN

Depth Base: 4728 Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4490 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4490 Depth Base:

API #: 30-015-32217

IC# 3001576903200

Status: Active

Type: Oil

Surface:

2190 FSL

1664 FWL Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE W D 'E'

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

Depth Total Logger: 4861

Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

GO-TECH - Well Name: W D MCINTYRE E 010

Depth Base: 461 Cement Amount:

450 sx

Top of Cement: Circ

CASING Size: 13 3/8 IN CASING Size: 8 5/8 IN

Depth Base: 1210

Cement Amount:

575 sx Top of Cement: Circ

CASING Size: 5 1/2 IN

Cement Amount:

Depth Base: 4850

Cement Amount:

985 sx 1 Top of Cement:

TUBING Size: 27/8 IN

Depth Base: 4802

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4354 Depth Base: 4791

Test Perf Report:

Type: INITIAL POTENTIAL #: 1 Formation Top

Depth Top: 4354 Depth Base:

API #: 30-015-32257

IC# 3001571961200

Status: Active

Surface:

745 FNL

990 FWL Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: JENKINS 'B' FEDERA

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4780 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

GO-TECH - Operator: COG OPERATING LLC

Date of Abandonment:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

GO-TECH - Well Name: JENKINS B FEDERAL 014

GO-TECH - Plug Date:

Depth Base: 426 Cement Amount:

450 sx Top of Cement: Circ

CASING Size: 13 3/8 IN CASING Size: 8 5/8 IN

Depth Base: 1073 Cement Amount:

575 sx

Top of Cement: Circ

Depth Top: 4249 Depth Base:

CASING Size: 5 1/2 IN

Depth Base: 4774

Cement Amount:

Top of Cement:

1035 sx

TUBING Size: 27/8 IN

Depth Base: 4642

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

4639

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4249 Depth Base:

API #: 30-015-32330

Status: Active

Type: Oil

Surface:

990 FNL

1650 FEL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: THUNDER ROAD FED

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4850 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: THUNDER ROAD FEDERAL 006

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 8 5/8 IN

Depth Base:

373 Cement Amount: 275 sx

Top of Cement: Circ to Pit

CASING Size: 5 1/2 IN

Depth Base: 4848

Cement Amount:

1360 sx

Top of Cement: Circ to Pit

TUBING Size: 27/8 IN Depth Base: 4252 Cement Amount:

Top of Cement:

Test Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4277 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL #: 1 Formation Top

Depth Top: 4277 Depth Base:

API #: 30-015-32371

Status: Active

Type: Oil

Surface:

965 FNL

1650 FWL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: JENKINS 'B' FEDERA

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4775 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: JENKINS B FEDERAL 016

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK 425 Cement Amount:

450 sx

Top of Cement: 0

CASING Size: 13 3/8 IN CASING Size: 8 5/8 IN

Depth Base:

575 sx

Top of Cement: 0

CASING Size: 5 1/2 IN

Depth Base: 1067

Cement Amount: Cement Amount: 995 sx

Top of Cement: 0

Depth Base: 4768

TUBING Size: 27/8 IN

Depth Base: 4674

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4271 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL #: 1 Formation Top

Depth Top: 4271 Depth Base:

API #: 30-015-32384

IC # 3001571288200

Status: Active

Type: Oil

Surface:

2310 FNL

1750 FEL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: THUNDER ROAD FED

Well #: 5

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

Depth Total Logger: 4920

Depth True Vertical:

Formation at TD: PADDOCK

Date of Abandonment:

Producing Formation: PADDOCK

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: THUNDER ROAD FEDERAL 005

GO-TECH - Plug Date:

Depth Base: 373 300 sx

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 8 5/8 IN CASING Size: 5 1/2 IN

Depth Base: 4919

Cement Amount:

1275 sx

Top of Cement: Circ to Pit

TUBING Size: 27/8 IN

Depth Base: 4315

Cement Amount: Cement Amount:

Top of Cement: Circ to Pit Top of Cement:

Depth Top: 4338 Depth Base:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Test\_Perf\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top

Depth Top: 4338 Depth Base:

API #: 30-015-32425

IC# 3001578840200

Status: Active

Surface:

990 FNL

990 FEL

19 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section: Section:

Operator: MARBOB ENERGY CORP

Lease Name: BURCH KEELY UNIT

Well #:

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4823

Depth Total Logger:

Depth True Vertical:

Formation at TD: GLORIETA

Producing Formation: GLORIETA

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: BURCH KEELY UNIT 328

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

CASING Size: 8 5/8 IN

Depth Base:

355 Cement Amount: 300 sx

Top of Cement: Ready Mix to Surf

CASING Size: 5 1/2 IN

Depth Base: 4822

Cement Amount:

1325 sx

Top of Cement: Circ to Pit

TUBING Size: 27/8 IN

Depth Base: 4222

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: GLORIETA

Depth Top: 4226 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top:

4226 Depth Base:

UWI: 30015324260000 .

API #: 30-015-32426

IC # 3001578841200

Status: Active

Type: Oil

Surface:

1650 FSL 1295 FEL

Section:

18 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: BURCH KEELY UNIT

Well #: 329

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4825

Depth Total Logger:

Depth True Vertical:

Formation at TD: GLORIETA

Producing Formation: GLORIETA

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: BURCH KEELY UNIT 329

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

Depth Base: 365 Cement Amount: 300 sx Top of Cement:

CASING Size: 8 5/8 IN CASING Size: 5 1/2 IN

Depth Base: 4825

Cement Amount:

1125 sx Top of Cement: Circ to Pit

TUBING Size: 27/8 IN

Depth Base: 4221

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: GLORIETA

Depth Top: 4238 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4238 Depth Base:

API #: 30-015-32915

Status: Active

Type: Oil

Surface:

25 FNL 1825 FEL

19 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section: Section:

Operator: MARBOB ENERGY CORP

Lease Name: BURCH KEELY UNIT.

Well #: 357

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4720 Depth Total Logger: Depth True Vertical:

Formation at TD: GLORIETA

Producing Formation: GLORIETA

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: BURCH KEELY UNIT 357

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

GO-TECH - Plug Date:

Depth Base: 361

Cement Amount: 300 sx Top of Cement: Circ to Pit

CASING Size: 8 5/8 IN CASING Size: 4 1/2 IN

Depth Base: 4698 Cement Amount: 1310 sx

Top of Cement: Circ to Pit

TUBING Size: 27/8 IN

Depth Base: 4209

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: GLORIETA

Depth Top: 4233 Depth Base: 4518

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4233 Depth Base:

API #: 30-015-32916

Status: Active

Surface:

1400 FNL 1115 FEL

Section:

19 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: BURCH KEELY UNIT

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4822 Depth Total Logger:

Depth True Vertical:

Formation at TD: GLORIETA

Producing Formation: SAN ANDRES

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: BURCH KEELY UNIT 358

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

CASING Size: 8 5/8 IN

Depth Base: 355 Cement Amount:

300 sx

Top of Cement: Circ to Pit

CASING Size: 5 1/2 IN

Depth Base: 4818 Cement Amount:

1235 sx

Top of Cement: Circ to Pit

TUBING Size: 27/8 IN

Depth Base: 4227

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: SAN ANDRES

Depth Top: 4237 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4237 Depth Base:

API #: 30-015-32971

IC# 3001576236200

Status: Active

Type: Oil

Surface:

1295 FNL

1980 FEL

Section:

19 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: BURCH KEELY UNIT

Well #:

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4840 Depth Total Logger: Depth True Vertical:

Formation at TD: GLORIETA

Producing Formation: GLORIETA

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

GO-TECH - Well Name: BURCH KEELY UNIT 362

CASING Size: 8 5/8 IN

Depth Base: 406

Cement Amount:

400 sx

Top of Cement: Ready Mix to Surf

CASING Size: 5 1/2 IN

Depth Base: 4838

Cement Amount:

325 sx

TUBING Size: 27/8 IN

Depth Base: 4281

Cement Amount:

Top of Cement: Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: GLORIETA

Depth Top: 4286 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4286 Depth Base:

API#: 30-015-32972

IC# 3001576234200

Status: Active

Type: Oil

Surface:

1100 FSL

660 FEL

19 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section: Section:

Operator: MARBOB ENERGY CORP

Lease Name: BURCH KEELY UNIT

Well #: 364

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

Depth Total Driller:

4980 Depth Total Logger: Depth True Vertical:

Formation at TD: GLORIETA

Producing Formation: GLORIETA

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Plug Date:

GO-TECH - Well Name: BURCH KEELY UNIT 364

Depth Base:

370 Cement Amount: Top of Cement: Circ to Pit

CASING Size: 85/8 IN CASING Size: 5 1/2 IN

Depth Base: 4967

Cement Amount:

300 sx 1100 sx Top of Cement: Circ to Pit

TUBING Size: 27/8 IN

Depth Base: 4345

Cement Amount:

Top of Cement:

Test\_Report: Type: INITIAL POTENTIAL

#: 1 Formation Top: GLORIETA

Depth Top: 4368 Depth Base:

4767

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4368 Depth Base:

API #: 30-015-32991

IC# 3001578670200

Status: Active

Section: 19 Township 17 South Range 30 East Eddy County New Mexico

Type: Oil

Surface:

Bottom Hole:

965 FNL

Operator: MARBOB ENERGY CORP

330 FEL

Section:

Lease Name: BURCH KEELY UNIT

361 Well #:

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4812 Depth Total Logger: Depth True Vertical:

Formation at TD: GLORIETA

Producing Formation: GLORIETA

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

GO-TECH - Well Name: BURCH KEELY UNIT 361

CASING Size: 85/8 IN

Depth Base: 380 Cement Amount: 300 sx

Top of Cement: Ready Mix to Surf

CASING Size: 5 1/2 IN

Depth Base:

4811 Cement Amount: 1150 sx

Top of Cement: Circ to Pit

TUBING Size: 27/8 IN

Depth Base:

4245 Cement Amount: Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: GLORIETA

Depth Top: 4252 Depth Base:

4575

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top:

4252 Depth Base:

UWI: 30015334720000 Status: Active Type: Oil API #: 30-015-33472 Section: 20 Township 17 South Range 30 East Eddy County New Mexico Surface: 1500 FNL 2310 FWL Bottom Hole: Section: Operator: MACK ENERGY CORP Lease Name: JENKINS B FEDERAL Well #: 15 Field: LOCO HILLS Geologic Province: PERMIAN BASIN Depth Total Driller: 4935 Depth Total Logger: Depth True Vertical: Formation at TD: GLORIETA Producing Formation: GLORIETA Date of Abandonment: GO-TECH - Well Name: JENKINS B FEDERAL 015Q GO-TECH - Operator: COG OPERATING LLC GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA GO-TECH - Plug Date: CASING Size: 13 3/8 IN 475 sx Top of Cement: Circ Depth Base: 421 Cement Amount: CASING Size: 8 5/8 IN Depth Base: 1055 Top of Cement: Circ Cement Amount: 575 sx Top of Cement: CASING Size: 5 1/2 IN Depth Base: 4919 Cement Amount: 1100 sx TUBING Size: 27/8 IN Depth Base: 3992 Cement Amount: Top of Cement: TUBING Size: 27/8 IN Depth Base: 4691 Cement Amount: Top of Cement: SX Test\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top: GLORIETA 4272 Depth Base: Depth Top: Type: INITIAL POTENTIAL #: 4 Formation Top: SAN ANDRES 3046 Depth Base: 3968 Depth Top: Type: PRODUCTION TEST #: 1 Formation Top: SAN ANDRES Depth Top: 3958 Depth Base: 3968 Type: PRODUCTION TEST #: 2 Formation Top: SAN ANDRES Depth Top: 3379 Depth Base: 3574 Type: PRODUCTION TEST Depth Base: 3271 #: 3 Formation Top: SAN ANDRES Depth Top: 3046 Test\_Perf\_Report: Type: INITIAL POTENTIAL 4272 Depth Base: 4686 #: 1 Formation Top Depth Top: 3968 Type: INITIAL POTENTIAL #: 4 Formation Top Depth Top: 3046 Depth Base: Type: PRODUCTION TEST 3958 Depth Base: 3968 #: 1 Formation Top Depth Top: Depth Base: 3574 Type: PRODUCTION TEST #: 2 Formation Top Depth Top: 3379

Depth Base:

3271

3046

Depth Top:

Type: PRODUCTION TEST #: 3 Formation Top

API #: 30-015-33811

IC# 3001574881200

Status: Active

Type: Oil

Surface:

600 FSL

330 FEL

Section: 18 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: BURCH KEELY UNIT

382

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4760 Depth Total Logger: Depth True Vertical:

Formation at TD: GLORIETA

Producing Formation: GLORIETA

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: BURCH KEELY UNIT 382

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

CASING Size: 8 5/8 IN CASING Size: 5 1/2 IN Depth Base: 395 Cement Amount: 400 sx Top of Cement: Ready Mix to Surf Top of Cement: Circ to Pit

Depth Base: 4753

Cement Amount:

TUBING Size: 27/8 IN

Depth Base: 4246 Cement Amount: 1350 sx

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: GLORIETA

Depth Top: 4247 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL #: 1 Formation Top

Depth Top: 4247 Depth Base:

API #: 30-015-33816

IC# 3001574883200

Status: Active

Surface:

660 FNL 2559 FEL

Section: 19 Township 17 South Range 30 East Eddy County New Mexico

**Bottom Hole:** 

Section:

Operator: MARBOB ENERGY CORP

Lease Name: BURCH KEELY UNIT

Well #: 379

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4710 Depth Total Logger: Depth True Vertical:

Formation at TD: YESO

Producing Formation: YESO

Date of Abandonment:

GO-TECH - Plug Date:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: BURCH KEELY UNIT 379

CASING Size: 85/8 IN

393 Depth Base:

Cement Amount: 300 sx Top of Cement: 0 .

CASING Size: 5 1/2 IN

Depth Base: 4710

Cement Amount: 1010 sx

Top of Cement: 0

TUBING Size: 27/8 IN

Depth Base: 4592

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: YESO

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

Depth Top: 4193 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4193 Depth Base:

UWI: 30015341380000 API #: 30-015-34138 IC# 3001578069200 Status: Active Section: 20 Township 17 South Range 30 East Eddy County New Mexico Surface: 1525 FWL Bottom Hole: Section: Operator: MACK ENERGY CORP Lease Name: JENKINS B FEDERAL Field: LOCO HILLS Geologic Province: PERMIAN BASIN Depth Total Logger: Depth Total Driller: 4735 Depth True Vertical: Formation at TD: PADDOCK Producing Formation: SAN ANDRES Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name; JENKINS B FEDERAL 017R GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK CASING Size: 13 3/8 IN Depth Base: 448 Cement Amount: 448 sx Top of Cement: Circ CASING Size: 8 5/8 IN Depth Base: 1047 Cement Amount: 750 sx Top of Cement: Circ CASING Size: 5 1/2 IN Depth Base: 4726 Cement Amount: 940 sx Top of Cement: TUBING Size: 27/8 IN Depth Base: 4654 Top of Cement: Cement Amount: Test\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top: SAN ANDRES Depth Top: 3018 Depth Base:

Type: Oil

4653

Test\_Perf\_Report:

Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4268 Depth Base: 4653 Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 3793 Depth Base: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 3354 Depth Base: 3540 Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 3018 Depth Base: 3248

API #: 30-015-34192

IC# 3001578285200

Status: New (Not drill Type: Gas

Surface:

1640 FSL 2100 FEL

Section: 19 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole;

Section:

Operator: GRUY PET MGMT CO

Lease Name: GRAYBURG DEEP UNI

Field: SAND TANK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

Depth Total Logger:

Depth True Vertical:

Formation at TD:

Producing Formation:

Date of Abandonment:

GO-TECH - Operator: CIMAREX ENERGY CO OF C GO-TECH - Well Name: GRAYBURG DEEP 020

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name:

Test\_Report:

Test\_Perf\_Report:

API #: 30-015-34447 IC # 3001570802200

Status: Active

Surface:

990 FNL

330 FEL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE W D 'C'

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

6020

Depth Total Logger:

Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: W D MCINTYRE C 008

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 13 3/8 IN

Depth Base: 421 Cement Amount:

Top of Cement: Ready Mix to Surf

CASING Size: 8 5/8 IN

Depth Base: 1041 Depth Base: 6012

Cement Amount: Cement Amount: 450 sx 850 sx

Top of Cement: Circ

CASING Size: 5 1/2 IN

1420 sx

Cement Amount:

Top of Cement: Circ

TUBING Size: 27/8 IN

Depth Base: 5759

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4872 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL Type: INITIAL POTENTIAL

Type: INITIAL POTENTIAL

#: 1 Formation Top

#: 1 Formation Top #: 1 Formation Top Depth Top: 5611 Depth Base:

5729

Depth Top: 5104 Depth Base:

5471 Depth Top: 4872 Depth Base:

API#: 30-015-34473

IC# 3001570798200

Status: Active

Type: Oil

Surface:

330 FNL

990 FEL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE W D 'C'

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

6040 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: W D MCINTYRE C 009

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 13,3/8 IN CASING Size: 8 5/8 IN

Depth Base: 415

Cement Amount: 628 sx Top of Cement:

Depth Base: 1123

Cement Amount:

900 sx

Top of Cement:

CASING Size: 5 1/2 IN

Depth Base: 6031

Cement Amount:

1245 sx

Top of Cement:

TUBING Size: 27/8 IN

Depth Base: 5696

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 5033 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 5431 Depth Base:

5680

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top:

5033 Depth Base:

API #: 30-015-34474

IC# 3001570796200

Status: Active

Type: Oil

Surface:

Bottom Hole:

430 FWL Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Section:

Operator: COG OPERATING LLC

330 FNL

Lease Name: JENKINS B FEDERAL

Well #:

Field: LOCO HILLS Depth Total Driller:

Geologic Province: PERMIAN BASIN

Depth Total Logger: 6401

Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: JENKINS B FEDERAL 018 GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

GO-TECH - Plug Date:

Depth Base: 425 Cement Amount: Top of Cement:

CASING Size: 13 3/8 IN CASING Size: 8 5/8 IN CASING Size: 5 1/2 IN

Depth Base: 1047 Cement Amount:

449 sx. 525 sx Top of Cement:

Depth Base: 6389 Cement Amount:

Top of Cement:

TUBING Size: 27/8 IN

Depth Base: 6203 Cement Amount: 1505 sx Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 5082 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top:

5082 Depth Base:

API #: 30-015-34537

IC# 3001570795200

Status: Active

Surface:

1140 FSL

2310 FEL

Section: 17 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole: 988 FSL

2310 FEL

Section: 17

Lease Name: MCINTYRE DK FEDER

Well #:

Operator: MACK ENERGY CORP Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

5108

Depth Total Logger:

Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: MCINTYRE DK FEDERAL 014

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK;

GRAYBURG JACKSON; SR-Q-G-SA

CASING Size: 13 3/8 IN

Depth Base: 440 Cement Amount: Cement Amount:

Top of Cement: 500 sx 650 sx Top of Cement:

CASING Size: 8 5/8 IN

Depth Base: 1024

CASING Size: 5 1/2 IN Depth Base: 5100

Cement Amount:

1235 sx Top of Cement:

TUBING Size: 27/8 IN

Depth Base: 4682

Cement Amount:

Top of Cement:

Test\_Report:

Test\_Perf\_Report:

Type: PRODUCTION TEST #: 1 Formation Top GRAYBURG

Depth Top: 2766 Depth Base:

4597

JACKSON SR Q G SA

API #: 30-015-34596

IC# 3001571796200

Status: New (Not drill

Type: Gas

Surface:

Bottom Hole:

330 FNL

Operator: GRUY PET MGMT CO

610 FEL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico Section:

Lease Name: LOCO HILLS 20 FEDE

Well #: 1

Field: EMPIRE SOUTH

Geologic Province: PERMIAN BASIN Depth Total Logger:

Depth True Vertical:

Depth Total Driller: Formation at TD:

Producing Formation:

Date of Abandonment:

GO-TECH - Operator: CIMAREX ENERGY CO OF C GO-TECH - Well Name: LOCO HILLS 20 FED COM 001

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name:

Test\_Report:

Test\_Perf\_Report:

API #: 30-015-34775

3001572777200

Type: Oil

Surface:

330 FSL

990 FWL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE B

Well #: 10

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

7035 Depth Total Logger: Depth True Vertical:

Formation at TD: LOCO HILLS AB

Producing Formation: LOCO HILLS AB

Date of Abandonment:

GO-TECH - Well Name: MCINTYRE B 010 GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS ABO

Status: Active

CASING Size: 13 3/8 IN

Depth Base: 442 Cement Amount: 475 sx

Top of Cement:

CASING Size: 85/8 IN

Depth Base: 1062

Cement Amount: 650 sx Top of Cement:

CASING Size: 5 1/2 IN

Depth Base: 7028 1960 sx

Top of Cement:

Cement Amount:

TUBING Size: 27/8 IN

Depth Base: 6888

Cement Amount:

Top of Cement:

Test\_Report:

Test\_Perf\_Report:

Type: PRODUCTION TEST #: 1 Formation Top LOCO HILLS ABO Depth Top: 6750 Depth Base:

UWI: 30015348060000 API #: 30-015-34806 IC # 3001572778200 Status: Spud (11/200 Type: Oil Surface: 675 FSL 1120 FEL Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole: 990 FSL 990 FEL Section: 20

Operator: MACK ENERGY CORP Lease Name: MCINTYRE A EAST Well #: 19

Field: LOCO HILLS Geologic Province: PERMIAN BASIN

Depth Total Driller: 5960 Depth Total Logger: Depth True Vertical:

Formation at TD: Producing Formation: Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: MCINTRYE A EAST 019

GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name:

CASING Size: 13 3/8 IN Depth Base: 400 Top of Cement: Cement Amount: 943 sx CASING Size: 8 5/8 IN Depth Base: 1345 Top of Cement: Cement Amount: 976 sx CASING Size: 5 1/2 IN Depth Base: 5950 Cement Amount: 1856 sx Top of Cement:

Test\_Report:

Test\_Perf\_Report:

UWI: 30015041840000 Type: Oil API #: 30-015-04184 IC# Status: Active Surface: 330 FSL 330 FEL 17 Township 17 South Range 30 East Eddy County New Mexico Section: Bottom Hole: Section: Operator: MACK ENERGY CORP Lease Name: MCINTYRE 'DK' FEDE Well #: Field: LOCO HILLS Geologic Province: PERMIAN BASIN Depth Total Driller: Depth True Vertical: 4796 Depth Total Logger: Date of Abandonment: Formation at TD: PADDOCK Producing Formation: PADDOCK GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: MCINTYRE DK FEDERAL 001 GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK GO-TECH - Plug Date: CASING Size: 9 5/8 IN Depth Base: 526 Cement Amount: 60 sx Top of Cement: CASING Size: 7 IN Depth Base: 2905 100 sx Top of Cement: Cement Amount: CASING Size: 4 1/2 IN Depth Base: 4788 400 sx Top of Cement: 2800 Cement Amount: TUBING Size: 27/8 IN Top of Cement: Depth Base: 4633 Cement Amount: SX Test\_Report: Depth Top: Type: INITIAL POTENTIAL 4306 Depth Base: 4597 #: 1 Formation Top: **PADDOCK** 2905 Depth Base: 3241 Type: INITIAL POTENTIAL 1 Formation Top: Depth Top: Depth Top: 2905 Depth Base: Type: PRODUCTION TEST 1 Formation Top: **GRAYBURG-SAN** 3241 **ANDRES** Type: PRODUCTION TEST #: 1 Formation Top: Depth Top: 2905 Depth Base: 3241 Type: PRODUCTION TEST #: 2 Formation Top: Depth Top: 2905 Depth Base: 3241 Type: PRODUCTION TEST Depth Top: 2905 Depth Base: 3241 #: 3 Formation Top: Test\_Perf\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4306 Depth Base: 4597 Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 2905 Depth Base: 3241 Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 2905 Depth Base: 3241

Depth Top:

Depth Top:

Depth Top:

2905

2905

Depth Base:

Depth Base:

2905 Depth Base:

3241

3241

#: 1 Formation Top

#: 2 Formation Top

#: 3 Formation Top

Type: PRODUCTION TEST

Type: PRODUCTION TEST

Type: PRODUCTION TEST

UWI: 30015041860000 API #: 30-015-04186 Status: Active Type: Oil Surface: 660 FSL 1980 FWL 17 Township 17 South Range 30 East Eddy County New Mexico Section: Bottom Hole: Section: Operator: MACK ENERGY CORP Lease Name: MCINTYRE 'DK' FEDE Well #: 3 Field: LOCO HILLS Geologic Province: PERMIAN BASIN Depth Total Driller: 4797 Depth Total Logger: Depth True Vertical: Formation at TD: PADDOCK Producing Formation: PADDOCK Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: MCINTYRE DK FEDERAL 003 GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK CASING Size: 10 3/4 IN Depth Base: Top of Cement: 532 Cement Amount: 100 sx CASING Depth Base: Size: 7 IN 3295 Cement Amount: 1000 sx Top of Cement: CASING Size: 4 1/2 IN Depth Base: 4782 Cement Amount: 300 sx Top of Cement: 3295 TUBING Size: 27/8 IN Depth Base: 4609 Cement Amount: Top of Cement: Test\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top: **PADDOCK** Depth Top: 4226 Depth Base: 4590 Type: INITIAL POTENTIAL #: 1 Formation Top: **GRAYBURG** Depth Top: 2470 Depth Base: 2645 Type: PRODUCTION TEST 2645 #: 1 Formation Top: **GRAYBURG** Depth Top: 2470 Depth Base: Type: PRODUCTION TEST #: 1 Formation Top: Depth Top: 3194 Depth Base: 3256 Type: PRODUCTION TEST #: 2 Formation Top: Depth Top: 3112 Depth Base: 3152 Type: PRODUCTION TEST #: 3 Formation Top: 2470 Depth Base: 2645 Depth Top: Type: PRODUCTION TEST #: 4 Formation Top: Depth Base: Depth Top: Type: PRODUCTION TEST #: 5 Formation Top: Depth Top: 3194 Depth Base: 3256 Type: PRODUCTION TEST #: 6 Formation Top: Depth Top: 3112 Depth Base: 3142 Type: PRODUCTION TEST #: 7 Formation Top: Depth Top: 2470 Depth Base: 2645 Test\_Perf\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4226 Depth Base: 4590 Type: INITIAL POTENTIAL #: 1 Formation Top 2645 Depth Top: 2470 Depth Base: Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 2470 Depth Base: 2645 Type: PRODUCTION TEST #: 1 Formation Top Depth Base: 3256 Depth Top: 3194 Type: PRODUCTION TEST #: 2 Formation Top Depth Base: 3152 Depth Top: 3112 Type: PRODUCTION TEST #: 3 Formation Top Depth Top: 2635 Depth Base: 2645 Type: PRODUCTION TEST #: 3 Formation Top Depth Top: 2605 Depth Base: 2615 #: 3 Formation Top Type: PRODUCTION TEST 2550 2570 Depth Top: Depth Base: Type: PRODUCTION TEST #: 3 Formation Top Depth Top: 2470 Depth Base: 2505 Type: PRODUCTION TEST #: 5 Formation Top Depth Top: 3194 Depth Base: 3256

Depth Top:

Depth Top:

3112 Depth Base:

2470 Depth Base:

3142

2645

Type: PRODUCTION TEST

Type: PRODUCTION TEST

#: 6 Formation Top

#: 7 Formation Top

UWI: 30015041880000 API #: 30-015-04188 Status: Active Type: Oil 18 Township 17 South Range 30 East Eddy County New Mexico Surface: 660 FSL 1980 FEL Section: Bottom Hole: Section: Well #: Operator: Lease Name: Field: Geologic Province: Depth Total Driller: Depth Total Logger: Depth True Vertical: Formation at TD: Producing Formation: Date of Abandonment: GO-TECH - Operator: MARBOB ENERGY CORP GO-TECH - Well Name: BURCH KEELY UNIT 028 GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA CASING Size: 9 IN 509 Depth Base: Top of Cement: Cement Amount: 50 sx CASING Size: 7 IN Depth Base: 2903 Top of Cement: Cement Amount: 100 sx Depth Base: LINER Size: 5 1/2 IN 4209 Top of Cement: Cement Amount: 100 sx Test\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top: **GRAYBURG-SAN** Depth Top: 2470 Depth Base: 3298 ANDRES Type: INITIAL POTENTIAL #: 1 Formation Top: Depth Top: 4209 Depth Base: 4243 Type: INITIAL POTENTIAL #: 1 Formation Top: Depth Top: 2903 Depth Base: 3185 Type: PRODUCTION TEST 4243 #: 1 Formation Top: Depth Top: 4209 Depth Base: Type: PRODUCTION TEST #: 1 Formation Top: Depth Top: 4209 Depth Base: 4243 Type: PRODUCTION TEST #: 2 Formation Top: Depth Top: 4209 Depth Base: 4243 Test\_Perf\_Report: Type: INITIAL POTENTIAL 3298

Depth Top:

3290

3122

2688

2577

2470

4209

2903

4209

4209

4209

Depth Base:

3225

2694

2583

2476

4243

3185

4243

4243

4243

#: 1 Formation Top

#: 2 Formation Top



Type: INITIAL POTENTIAL

Type: PRODUCTION TEST

Type: PRODUCTION TEST

Type: PRODUCTION TEST

UWI: 30015041890000 API #: 30-015-04189 Type: Oil IC # · Status: Active 18 Township 17 South Range 30 East Eddy County New Mexico Surface: 660 FSL 660 FEL Section: Bottom Hole: Section: Lease Name: GRAYBURG DEEP UNI Well #: Operator: GREAT WESTERN DRL CO Field: GRAYBURG Geologic Province: PERMIAN BASIN Depth Total Driller: Depth True Vertical: 11422 Depth Total Logger: Date of Abandonment: Formation at TD: UNKNOWN Producing Formation: GLORIETA GO-TECH - Operator: MARBOB ENERGY CORP GO-TECH - Well Name: BURCH KEELY UNIT 027 GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA GO-TECH - Plug Date: CASING Size: 13 3/8 IN Depth Base: 345 Cement Amount: 325 sx Top of Cement: CASING Size: 9 5/8 IN 1600 sx Top of Cement: Depth Base: 2735 Cement Amount: CASING Top of Cement: Size: 7 IN Depth Base: 4209 Cement Amount: 150 sx CASING Size: 5 1/2 IN Top of Cement: Depth Base: 7704 Cement Amount: 210 sx Test\_Report: 4240 Type: INITIAL POTENTIAL #: 1 Formation Top: **GLORIETA** Depth Top: 4209 Depth Base: Depth Base: 7528 Type: PRODUCTION TEST #: 1 Formation Top: Depth Top: 7520 Depth Base: 7528 Type: PRODUCTION TEST #: 2 Formation Top: Depth Top: 7520 Type: PRODUCTION TEST #: 3 Formation Top: Depth Top: 7520 Depth Base: 7528 Type: PRODUCTION TEST #: 4 Formation Top: Depth Top: 7550 Depth Base: 7574 Type: PRODUCTION TEST #: 5 Formation Top: Depth Top: 7516 Depth Base: 7524 Type: PRODUCTION TEST #: 6 Formation Top: Depth Top: 7516 Depth Base: 7524 Type: PRODUCTION TEST #: 7 Formation Top: Depth Top: 7550 Depth Base: 7582 Depth Base: 4278 Type: PRODUCTION TEST #: 8 Formation Top: Depth Top: 4209 Type: PRODUCTION TEST #: 9 Formation Top: Depth Top: 4209 Depth Base: 4240 Test\_Perf\_Report: Type: INITIAL POTENTIAL Depth Top: 4209 Depth Base: 4240 #: 1 Formation Top Depth Base: 7528 Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 7520 Depth Base: Type: PRODUCTION TEST #: 2 Formation Top Depth Top: 7520 7528 Depth Base: Type: PRODUCTION TEST 7528 #: 3 Formation Top Depth Top: 7520 Type: PRODUCTION TEST #: 4 Formation Top Depth Top: 7550 Depth Base: 7574 Type: PRODUCTION TEST #: 5 Formation Top Depth Top: 7516 Depth Base: 7524 Depth Base: 7524 Type: PRODUCTION TEST #: 6 Formation Top Depth Top: 7516 Type: PRODUCTION TEST #: 7 Formation Top Depth Top: 7550 Depth Base: 7582

Depth Top:

Depth Top:

4209

4209

Depth Base:

Depth Base:

4278

4240

Type: PRODUCTION TEST

Type: PRODUCTION TEST

#: 8 Formation Top

#: 9 Formation Top

UWI: 30015042140000 API #: 30-015-04214 Status: Active Type: Oil 20 Township 17 South Range 30 East Eddy County New Mexico Surface: 1650 FNL 330 FWL Section: Bottom Hole: Section: Operator: MACK ENERGY CORP Lease Name: JENKINS 'B' FEDERA Well #: 1 Field: LOCO HILLS Geologic Province: PERMIAN BASIN Depth Total Driller: Depth Total Logger: Depth True Vertical: 4788 Formation at TD: PADDOCK Producing Formation: PADDOCK Date of Abandonment: GO-TECH - Well Name: JENKINS B FEDERAL 001 GO-TECH - Operator: COG OPERATING LLC GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK GO-TECH - Plug Date: CASING Size: 10 3/4 IN Depth Base: 480 Cement Amount: 500 sx Top of Cement: 156 (Estimated) Top of Cement: 2663 (Estimated) CASING Size: 7 IN Depth Base: 3003 Cement Amount: 100 sx CASING Size: 4 1/2 IN Depth Base: 4788 275 sx Top of Cement: Cement Amount: TUBING Size: 23/8 IN Depth Base: 4737 Top of Cement: Cement Amount: Test\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top: PADDOCK Depth Top: 4282 Depth Base: 4736 Type: INITIAL POTENTIAL #: 1 Formation Top: Depth Top: 3003 Depth Base: 3258 3003 Depth Base: Type: PRODUCTION TEST #: 1 Formation Top: QUEEN Depth Top: 3258 Type: PRODUCTION TEST #: 1 Formation Top: Depth Top: 3003 Depth Base: 3258 Type: PRODUCTION TEST #: 2 Formation Top: Depth Top: 3003 Depth Base: 3258 Test\_Perf\_Report: Type: INITIAL POTENTIAL 4282 Depth Base: 4736 #: 1 Formation Top Depth Top: Type: INITIAL POTENTIAL 3003 Depth Base: 3258 #: 1 Formation Top Depth Top: Type: PRODUCTION TEST Depth Top: 3003 Depth Base: 3258 #: 1 Formation Top Depth Base: Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 3003 3258

Type: PRODUCTION TEST #: 2 Formation Top

3003 Depth Base:

Depth Top:

UWI: 30015042150000	API #: 30-015-04215	IC#	Status: Active	Type: Oil
Surface: 990 FNL	330 FWL Section:	20 Township 17 So	uth Range 30 East Ed	ddy County New Mexico
Bottom Hole:	Section:			
Operator: MACK ENERGY	CORP	Lease Name: JEN	KINS B FEDERAL	Well #: 2
Field: GRAYBURG		Geologic Province	: PERMIAN BASIN	
Depth Total Driller:	4715 Depth Total	l Logger:	Depth Tru	e Vertical:
Formation at TD: PADDOCI	K Producing	Formation: PADDO	CK Date of Al	pandonment:
GO-TECH - Operator: COG	OPERATING LLC	GO-TECH - We	II Name: JENKINS B FI	
GO-TECH - Plug Date:		- One_Producing Poo	Name: LOCO HILLS;	PADDOCK
CASING Size: 8 IN	Depth Base: 500	Cement Amount:	50 sx Top of Ceme	
CASING Size: 7 IN	Depth Base: 2910	Cement Amount:	100 sx Top of Ceme	
CASING Size: 4 1/2 IN	Depth Base: 4704	Cement Amount:	380 sx Top of Ceme	ent: 3136
TUBING Size: 27/8 IN	Depth Base: 4583	Cement Amount:	sx Top of Ceme	ent:
Test_Report:				
Type: INITIAL POTENTIAL	#: 1 Formation Top	: PADDOCK	Depth Top: 4258	Depth Base: 4570
Type: INITIAL POTENTIAL	#: 1 Formation Top	):	Depth Top: 2910	Depth Base: 3265
Type: PRODUCTION TEST	#: 1 Formation Top	: QUEEN-SAN ANDRES	Depth Top: 2910	Depth Base: 3265
Type: PRODUCTION TEST	#: 1 Formation Top	):	Depth Top: 2910	Depth Base: 3265
Type: PRODUCTION TEST	#: 2 Formation Top	<b>:</b>	Depth Top: 2910	Depth Base: 3265
Type: PRODUCTION TEST	#: 3 Formation Top	·	Depth Top: 2910	Depth Base: 3265
Test_Perf_Report:				
Type: INITIAL POTENTIAL	#: 1 Formation Top	)	Depth Top: 4258	Depth Base: 4570
Type: INITIAL POTENTIAL	#: 1 Formation Top	)	Depth Top: 2910	Depth Base: 3265
Type: PRODUCTION TEST	#: 1 Formation Top	<b>)</b>	Depth Top: 2910	Depth Base: 3265
Type: PRODUCTION TEST	#: 1 Formation Top		Depth Top: 2910	Depth Base: 3265
Type: PRODUCTION TEST	#: 2 Formation Top	,	Depth Top: 2910	Depth Base: 3265

Depth Top: 2910 Depth Base: 3265

Type: PRODUCTION TEST #: 3 Formation Top

UWI: 30015042160000 IC# 300157023397 API #: 30-015-04216 Status: Active Surface: 330 FNL 2310 FWL Section: 20 Township 17 South Range 30 East Eddy County New Mexico Bottom Hole: Section: Operator: MACK ENERGY CORP Lease Name: JENKINS 'B' FEDERA Field: GRAYBURG Geologic Province: PERMIAN BASIN Depth Total Driller: 4745 Depth Total Logger: Depth True Vertical: Formation at TD: PADDOCK Producing Formation: PADDOCK Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: JENKINS B FEDERAL 003 GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK CASING Size: 8 1/4 IN Depth Base: 505 Cement Amount: Top of Cement: 50 sx CASING Size: 7 IN Depth Base: 2875 100 sx Top of Cement: Cement Amount: CASING Depth Base: Size: 4 1/2 IN 4741 Cement Amount: 2340 sx Top of Cement: 1960 TUBING Size: 27/8 IN Depth Base: 4615 Cement Amount: Top of Cement: Test\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top: PADDOCK Depth Top: 4337 Depth Base: Type: INITIAL POTENTIAL #: 1 Formation Top: Depth Top: 2875 Depth Base: Type: PRODUCTION TEST #: 1 Formation Top: SAN ANDRES D Depth Top: 2875 Depth Base: Type: PRODUCTION TEST #: 1 Formation Top: Depth Top: 2875 Depth Base: Test\_Perf\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4337 Depth Base: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 2875 Depth Base:

#: 1 Formation Top

#: 1 Formation Top

Type: PRODUCTION TEST

Type: PRODUCTION TEST

Type: Oil

4600

3300

3300

3300

4600

3300

3300

3300

Depth Top:

Depth Top:

2875

2875

Depth Base:

Depth Base:

Well #:

UWI: 30015042170000 API #: 30-015-04217 Status: Active Type: Oil Surface: 660 FSL 20 Township 17 South Range 30 East Eddy County New Mexico 660 FWL Section: Bottom Hole: Section: Operator: MACK ENERGY CORP Lease Name: MCINTYRE 'B' Well #: 2 Field: LOCO HILLS Geologic Province: PERMIAN BASIN Depth Total Driller: 5080 Depth Total Logger: 4888 Depth True Vertical: Formation at TD: PADDOCK Producing Formation: PADDOCK Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: MCINTYRE B 002 GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK CASING Size: 8 5/8 IN Depth Base: 542 Cement Amount: Top of Cement: 50 sx CASING Size: 7 IN Depth Base: 3075 Cement Amount: 100 sx Top of Cement: CASING Size: 7 IN Depth Base: 3170 Cement Amount: Top of Cement: SX CASING Size: 4 1/2 IN Depth Base: 5064 Cement Amount: 360 sx Top of Cement: TUBING Size: 27/8 IN Depth Base: 4754 Cement Amount: Top of Cement: Test\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top: **PADDOCK** Depth Top: 4491 Depth Base: Type: INITIAL POTENTIAL #: 1 Formation Top: Depth Top: 3075 Depth Base: 3346 #: 1 Formation Top: Type: PRODUCTION TEST GRAYBURG-SAN Depth Top: 3075 Depth Base: 3346 **ANDRES** Test\_Perf\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top 4718 Depth Top: 4491 Depth Base: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 3075 Depth Base: 3346

Type: PRODUCTION TEST

#: 1 Formation Top

3075 Depth Base:

Depth Top:

UWI: 30015042180000 API #: 30-015-04218 Status: Active Type: Oil Surface: 2310 FSL 330 FWL 20 Township 17 South Range 30 East Eddy County New Mexico Section: Bottom Hole: Section: Operator: MACK ENERGY CORP. Lease Name: MCINTYRE 'B' Well #: Field: LOCO HILLS Geologic Province: PERMIAN BASIN Depth Total Driller: 4861 Depth Total Logger: Depth True Vertical: Formation at TD: YESO Producing Formation: PADDOCK Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: MCINTYRE B 001 GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK CASING Size: 10 IN Depth Base: 551 Cement Amount: 50 sx Top of Cement: CASING Size: 7 IN Depth Base: 2640 Cement Amount: 100 sx Top of Cement: CASING Size: 4 1/2 IN Depth Base: 4850 Cement Amount: 375 sx Top of Cement: TUBING Size: 27/8 IN Depth Base: 4742 Cement Amount: Top of Cement: Test\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top: **PADDOCK** Depth Top: 4323 Depth Base: Type: INITIAL POTENTIAL 3270 #: 1 Formation Top: Depth Top: 2640 Depth Base: Type: PRODUCTION TEST Formation Top: **GRAYBURG-SAN** Depth Top: 2640 Depth Base: 3270 **ANDRES** Type: PRODUCTION TEST #: 1 Formation Top: Depth Top: 2640 Depth Base: 3270 Type: PRODUCTION TEST #: 2 Formation Top: Depth Top: 2640 Depth Base: 3270 Type: PRODUCTION TEST #: 3 Formation Top: Depth Top: 2640 Depth Base: 3270 Type: PRODUCTION TEST #: 4 Formation Top: Depth Top: 2640 Depth Base: 3270 Test\_Perf\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4323 Depth Base: 4714 Type: INITIAL POTENTIAL 3270 #: 1 Formation Top Depth Top: 2640 Depth Base: Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 2640 Depth Base: 3270 Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 2640 Depth Base: 3270 Type: PRODUCTION TEST #: 2 Formation Top Depth Top: 2640 Depth Base: 3270

Depth Top:

Depth Top:

2640

2640

Depth Base:

Depth Base:

3270

3270

Type: PRODUCTION TEST

Type: PRODUCTION TEST

#: 3 Formation Top

#: 4 Formation Top

UWI: 30015042190000 API #: 30-015-04219 Status: Active Type: Oil Surface: 2430 FSL 990 FEL Section: 20 Township 17 South Range 30 East Eddy County New Mexico Bottom Hole: Section: Operator: MACK ENERGY CORP Lease Name: MCINTYRE 'A' Well #: Field: LOCO HILLS Geologic Province: PERMIAN BASIN Depth Total Logger: Depth Total Driller: 4762 Depth True Vertical: Formation at TD: PADDOCK Producing Formation: PADDOCK Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: MCINTRYE A EAST 001 GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK CASING Size: 10 3/4 IN Depth Base: 548 50 sx Top of Cement: Cement Amount: CASING Size: 7 IN Depth Base: 2675 100 sx Top of Cement: Cement Amount: 4762 CASING Size: 4 1/2 IN Depth Base: Cement Amount: 360 sx Top of Cement: 2670 TUBING Size: 23/8 IN Depth Base: 4709 Cement Amount: Top of Cement: Test\_Report: Type: INITIAL POTENTIAL 4700 #: 1 Formation Top: PADDOCK Depth Top: 4423 Depth Base: Type: INITIAL POTENTIAL #: 1 Formation Top: Depth Top: 2675 Depth Base: 3348 Depth Top: Type: PRODUCTION TEST #: 1 Formation Top: GRAYBURG-SAN 2675 Depth Base: 3348 **ANDRES** Test\_Perf\_Report: 4700 Type: INITIAL POTENTIAL: #: 1 Formation Top Depth Top: 4423 Depth Base: Type: INITIAL POTENTIAL #: 1 Formation Top 3348

Type: PRODUCTION TEST #: 1 Formation Top

Depth Top:

Depth Top:

2675 Depth Base:

2675 Depth Base:

UWI: 30015042210000 API #: 30-015-04221 Status: Active Type: Oil Surface: 2365 FSL 2310 FEL Section: 20 Township 17 South Range 30 East Eddy County New Mexico Bottom Hole: Section: Operator: MACK ENERGY CORP Lease Name: MCINTYRE 'A' Well #: 3 Field: LOCO HILLS Geologic Province: PERMIAN BASIN Depth Total Driller: 5110 Depth Total Logger: Depth True Vertical: Formation at TD: PADDOCK Producing Formation: PADDOCK Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: MCINTYRE A WEST 003 GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK CASING Size: 8 1/4 IN Depth Base: 559 100 sx Cement Amount: Top of Cement: CASING Size: 7 IN Depth Base: 2606 Cement Amount: 100 sx Top of Cement: CASING Size: 4 1/2 IN Depth Base: 5082 Cement Amount: 450 sx Top of Cement: 2500 TUBING Size: 23/8 IN Depth Base: 4807 Cement Amount: Top of Cement: Test Report: Type: INITIAL POTENTIAL #: 1 Formation Top: PADDOCK Depth Top: 4336 Depth Base: 4784 Type: INITIAL POTENTIAL #: 1 Formation Top: Depth Top: 2606 Depth Base: 3331 Type: PRODUCTION TEST 1 Formation Top: GRAYBURG-SAN Depth Top: 2606 Depth Base: 3331 **ANDRES** Type: PRODUCTION TEST #: 1 Formation Top: Depth Base: 2724 Depth Top: 2606 Type: PRODUCTION TEST #: 2 Formation Top: Depth Base: 3331 Depth Top: 2606 Type: PRODUCTION TEST #: 3 Formation Top: Depth Top: Depth Base: 3331 2606 Type: PRODUCTION TEST #: 4 Formation Top: Depth Top: 2606 Depth Base: 3331 Test\_Perf\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4336 Depth Base: 4784 Type: INITIAL POTENTIAL #: 1 Formation Top Depth Base: 3331 Depth Top: 2606 Type: PRODUCTION TEST #: 1 Formation Top Depth Top: Depth Base: 3331 2606 Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 2606 Depth Base: 2724 Type: PRODUCTION TEST #: 2 Formation Top Depth Top: 2606 Depth Base: 3331 Type: PRODUCTION TEST #: 3 Formation Top Depth Base: Depth Top: 2606 3331

Depth Top:

2606

Depth Base:

3331

Type: PRODUCTION TEST

#: 4 Formation Top

API #: 30-015-04222 IC# Status: Plugged

Type: Oil

Surface:

1650 FSL

410 FEL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: FRANKLIN ASTN&FAIR I

Lease Name: MCINTYRE-FEDERAL

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

6857 Depth Total Logger: Depth True Vertical:

Formation at TD: QUEEN-SAN AN

Producing Formation: ABO /SH/

Date of Abandonment: 10/7/200

GO-TECH - Operator: MACK ENERGY CORP

GO-TECH - Well Name: MCINTYRE A 004

GO-TECH - Plug Date:

10/8/2002 GO-TECH - One\_Producing\_Pool\_Name:

CASING Size: 13 3/8 IN CASING Size: 8 5/8 IN

Depth Base: Depth Base: 1860

Cement Amount: Cement Amount:

Top of Cement: Top of Cement:

CASING Size: 5 1/2 IN

Depth Base: 6857

Cement Amount:

706 sx 700 sx

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: ABO /SH/

Depth Top: 6780 Depth Base: 6814

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 6780 Depth Base:

UWI: 30015042230000 Surface: Bottom Hole: Type: INITIAL POTENTIAL

API #: 30-015-04223

Status: Plugged

990 FSL

410 FEL Section:

20 Township 17 South Range 30 East Eddy County New Mexico

Section:

Operator: FRANKLIN ASTN&FAIR I

Lease Name: MCINTYRE-FEDE A

Well #: 5

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

6830 Depth Total Logger: Depth True Vertical:

Formation at TD: QUEEN-SAN AN

Producing Formation: SAN ANDRES D

Date of Abandonment: 10/23/19

GO-TECH - Operator: ENRON OIL & GAS CO

GO-TECH - Well Name: McINTYRE A 005

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name:

CASING Size: 85/8 IN

Depth Base: 1873 Cement Amount:

Top of Cement: 560 sx

CASING Size: 5 1/2 IN

Depth Base: 6830 Cement Amount: 550 sx

Top of Cement: 100

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top:

SAN ANDRES D #: 1 Formation Top:

Depth Top: 3398 Depth Base: 3446

Depth Top: 6770 Depth Base:

3446

3444

3442

3437

6800

Test\_Perf\_Report: Type: INITIAL POTENTIAL

Type: INITIAL POTENTIAL

Type: INITIAL POTENTIAL

Type: INITIAL POTENTIAL

Type: INITIAL POTENTIAL

Type: INITIAL POTENTIAL

Type: INITIAL POTENTIAL

Type: INITIAL POTENTIAL

Type: INITIAL POTENTIAL

Type: INITIAL POTENTIAL

Type: INITIAL POTENTIAL

Type: INITIAL POTENTIAL

#: 1 Formation Top #: 1 Formation Top

#: 1 Formation Top

#: 1 Formation Top

#: 1 Formation Top

#: 1 Formation Top

#: 1 Formation Top

#: 1 Formation Top

#: 1 Formation Top

#: 1 Formation Top

#: 1 Formation Top

#: 1 Formation Top

ABO /SH/

3446 Depth Base:

Depth Top: Depth Top: Depth Top:

3444 Depth Base: 3442 Depth Base:

Depth Top: 3437 Depth Base:

Depth Top: 3418 Depth Base: 3418 Depth Top: 3414 Depth Base: 3414

Depth Top: 3412 Depth Base: 3412 Depth Top: 3410 Depth Base: 3410

Depth Base: 3406 Depth Top: 3406 Depth Top: 3398 Depth Base: 3398 Depth Top: 6770 Depth Base: 6800

Depth Base: Depth Top: 6770

UWI: 30015042240000 API#: 30-015-04224 IC# 300157021998 Status: Active

Section: 20 Township 17 South Range 30 East Eddy County New Mexico Surface: 1650 FEL

GO-TECH - Well Name: MCINTYRE A WEST 006

Type: Oil

Bottom Hole: Section:

GO-TECH - Operator: COG OPERATING LLC

Operator: MACK ENERGY CORP Lease Name: MCINTYRE 'A'

Field: LOCO HILLS Geologic Province: PERMIAN BASIN

Depth Total Driller: 11300 Depth Total Logger: Depth True Vertical:

Formation at TD: MORROW Producing Formation: PADDOCK Date of Abandonment:

GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 85/8 IN Depth Base: 1850 Cement Amount: 800 sx Top of Cement:

Depth Base: 2595 CASING Size: 7 IN 380 sx Top of Cement: Circ to Surf Cement Amount:

CASING Size: 4 1/2 IN Depth Base: 5248 Cement Amount: 700 sx Top of Cement:

CASING Size: 4 1/2 IN Depth Base: E+04 1150 sx Top of Cement: 9500 Cement Amount:

Test\_Report:

Type: INITIAL POTENTIAL #: 1 Formation Top: PADDOCK Depth Top: 4505 Depth Base: Depth Top: 11224 Depth Base: 11234

Type: INITIAL POTENTIAL #: 1 Formation Top: MORROW

Test\_Perf\_Report:

Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4505 Depth Base: 4723 Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 11224 Depth Base: 11234 UWI: 30015042260000 Surface: Bottom Hole: Operator: MACK ENERGY CORP CASING Size: 95/8 IN CASING Size: 4 1/2 IN TUBING Size: 27/8 IN Test\_Report:

API #: 30-015-04226

Status: Active

Type: Oil

330 FNL

330 FEL

Section:

20 Township 17 South Range 30 East Eddy County New Mexico

Section:

Lease Name: MCINTYRE W D 'C'

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4858 Depth Total Logger: Depth True Vertical:

Formation at TD: YESO

Producing Formation: PADDOCK

GO-TECH - Operator: COG OPERATING LLC

Date of Abandonment:

GO-TECH - Well Name: W D MCINTYRE C 002

GO-TECH - Plug Date:

Depth Base: 515 Cement Amount:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 7 IN

Depth Base: 2929 50 sx

Top of Cement: Top of Cement:

Depth Base:

Cement Amount: Cement Amount: 100 sx

4824

360 sx Top of Cement:

Depth Base: 4657 Cement Amount:

Top of Cement:

Type: INITIAL POTENTIAL

#: 1 Formation Top: **PADDOCK**  Depth Top: 4244 Depth Base: 4644

Type: INITIAL POTENTIAL

#: 1 Formation Top:

Depth Top: 2929

Depth Base: 3265

Type: PRODUCTION TEST

Type: PRODUCTION TEST

Depth Base:

#: 1 Formation Top:

#: 1 Formation Top

GRAYBURG-SAN **ANDRES** 

Depth Top: 2929 3265

Test\_Perf\_Report:

Type: INITIAL POTENTIAL #: 1 Formation Top Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4244 Depth Top: 2929

4644 Depth Base: Depth Base: 3265

Depth Top:

2929 Depth Base:

UWI: 30015042270000 API #: 30-015-04227 IC# Status: Active Type: Oil Surface: 990 FEL Section: 20 Township 17 South Range 30 East Eddy County New Mexico 1650 FNL Bottom Hole: Section: Operator: MACK ENERGY CORP Lease Name: MCINTYRE W D 'C' Well #: Field: LOCO HILLS Geologic Province: PERMIAN BASIN Depth Total Driller: 4820 Depth Total Logger: Depth True Vertical: Formation at TD: YESO Producing Formation: PADDOCK Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: W D MCINTYRE C 003 GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK CASING Size: 8 1/4 IN Depth Base: 506 Cement Amount: 50 sx Top of Cement: CASING Size: 7 IN Depth Base: 2903 Top of Cement: Cement Amount: 100 sx CASING Size: 4 1/2 IN Depth Base: 4811 Cement Amount: 350 sx Top of Cement: TUBING Size: 27/8 IN Depth Base: 4763 Cement Amount: Top of Cement: Test\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top: PADDOCK Depth Top: 4301 Depth Base: Type: INITIAL POTENTIAL #: 1 Formation Top: 3300 Depth Top: 2903 Depth Base: Type: PRODUCTION TEST #: 1 Formation Top: **GRAYBURG-SAN** Depth Top: 2903 Depth Base: 3300 **ANDRES** Type: PRODUCTION TEST #: 1 Formation Top: Depth Top: 2903 Depth Base: 3300 Test\_Perf\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4301 Depth Base: 4726 Type: INITIAL POTENTIAL #: 1 Formation Top 3300 Depth Top: 2903 Depth Base: Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 2903 Depth Base: 3300

Depth Top:

2903 Depth Base:

3300

Type: PRODUCTION TEST

#: 1 Formation Top

UWI: 30015042310000 API #: 30-015-04231 IC# 300157023497 Type: Oil Status: Active Surface: 1650 FNL 1650 FWL 20 Township 17 South Range 30 East Eddy County New Mexico Section: Bottom Hole: Section: Operator: MACK ENERGY CORP Lease Name: JENKINS 'B' FEDERA Well #: Field: LOCO HILLS Geologic Province: PERMIAN BASIN Depth Total Driller: 4815 Depth Total Logger: Depth True Vertical: Formation at TD: PADDOCK Producing Formation: PADDOCK Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: JENKINS B FEDERAL 004 GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK CASING Size: 8 1/4 IN Depth Base: 506 Cement Amount: 50 sx Top of Cement: CASING Size: 7 IN Depth Base: 2843 Cement Amount: 100 sx Top of Cement: CASING Size: 4 1/2 IN Depth Base: 4788 Cement Amount: 1974 sx Top of Cement: 1624 TUBING Size: 27/8 IN Depth Base: 4650 Cement Amount: Top of Cement: Test\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top: PADDOCK Depth Top: 4637

4286 Depth Base: Type: INITIAL POTENTIAL #: 1 Formation Top: Depth Base: 3253 Depth Top: 2843 Type: PRODUCTION TEST #: 1 Formation Top: SAN ANDRES D 2843 Depth Base: Depth Top: 3253 Type: PRODUCTION TEST #: 1 Formation Top: Depth Top: 2843 Depth Base: 3253 Test\_Perf\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4286 Depth Base: 4637 Type: INITIAL POTENTIAL 3253 #: 1 Formation Top Depth Top: 2843 Depth Base: Type: PRODUCTION TEST #: 1 Formation Top 2843 Depth Base: 3253 Depth Top: Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 2843 Depth Base: 3253

UWI: 30015206610000 Status: Active Type: Oil API #: 30-015-20661 17 Township 17 South Range 30 East Eddy County New Mexico Surface: 660 FSL 860 FWL Section: Bottom Hole: Section: Well #: Operator: Lease Name: Geologic Province: Field: Depth True Vertical: Depth Total Driller: Depth Total Logger: Formation at TD: Producing Formation: Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: MCINTYRE DK FEDERAL 004 GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA CASING Size: 85/8 IN Depth Base: 515 Cement Amount: 225 sx Top of Cement: Circ CASING Size: 5 1/2 IN 4263 200 sx Top of Cement: 900 Depth Base: Cement Amount: Test\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top: QUEEN-Depth Top: 2016 Depth Base: GRAYBURG-SAN **ANDRES** Test\_Perf\_Report: Type: INITIAL POTENTIAL 4094 #: 1 Formation Top Depth Top: 4093 Depth Base: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 3559 Depth Base: 3568 Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 3078 Depth Base: 3196 Type: INITIAL POTENTIAL Depth Base: #: 1 Formation Top Depth Top: 3003 3036 Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 2664 Depth Base:

Depth Top:

Depth Top:

Depth Top:

2564

2472

Depth Base:

Depth Base:

2016 Depth Base:

2612

2492

2042

#: 1 Formation Top

#: 1 Formation Top

#: 1 Formation Top

Type: INITIAL POTENTIAL

Type: INITIAL POTENTIAL

Type: INITIAL POTENTIAL

API #: 30-015-20972

Status: Active

Type: Oil

Surface:

990 FSL 2310 FWL Section: 17 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator:

Lease Name:

Well #:

Field:

Geologic Province:

Depth Total Logger:

Depth True Vertical:

Depth Total Driller: Formation at TD:

Producing Formation:

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

GO-TECH - Well Name: MCINTYRE DK FEDERAL 006

GO-TECH - Plug Date:

Depth Base: 496

200 sx

Top of Cement:

CASING Size: 8 5/8 IN CASING Size: 5 1/2 IN

Depth Base: 4329

Cement Amount: Cement Amount:

850 sx

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: SAN ANDRES D

Depth Top: 3300 Depth Base: 4042

Test\_Perf\_Report:

Type: INITIAL POTENTIAL #: 1 Formation Top

Depth Top: 3300 Depth Base: 4042

UWI: 30015222160000 API #: 30-015-22216 Status: Active Type: Gas Surface: 1650 FSL 1980 FWL Section: 20 Township 17 South Range 30 East Eddy County New Mexico Bottom Hole: Section: Operator: MACK ENERGY CORP Lease Name: LOCO SW Well #: Field: LOCO HILLS Geologic Province: PERMIAN BASIN Depth Total Driller: 11400 Depth Total Logger: Depth True Vertical: Formation at TD: MISSISSIPPIAN Producing Formation: ABO /SH/ Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: LOCO SW 001 GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS;ABO CASING Size: 13 3/8 IN Depth Base: 500 Cement Amount: 487 sx Top of Cement: CASING Size: 8 5/8 IN Depth Base: Top of Cement: 940 3487 Cement Amount: 1335 sx CASING Size: 5 1/2 IN Depth Base: E+04 Cement Amount: 790 sx Top of Cement: TUBING Size: 23/8 IN Depth Base: 7947 Cement Amount: Top of Cement: Test\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top: ABO /SH/ Depth Top: 6941 Depth Base: Type: INITIAL POTENTIAL #: 1 Formation Top: MORROW Depth Top: 11101 Depth Base: 11129 Type: PRODUCTION TEST #: 1 Formation Top: MORROW Depth Top: 11101 Depth Base: 11129 Type: PRODUCTION TEST #: 1 Formation Top: MORROW Depth Top: 11101 Depth Base: 11129 Test\_Perf\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 6941 Depth Base: 6942 Type: INITIAL POTENTIAL Depth Top: 11101 Depth Base: 11129 #: 1 Formation Top Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 11101 Depth Base: 11129

Depth Top: 11122 Depth Base: 11129

Depth Top: 11101 Depth Base: 11111

Type: PRODUCTION TEST #: 1 Formation Top

Type: PRODUCTION TEST #: 1 Formation Top

UWI: 30015232650000 API #: 30-015-23265 IC# 300157013280 Status: Plugged 1650 FSL 1980 FWL 17 Township 17 South Range 30 East Eddy County New Mexico Surface: Section: Bottom Hole: Section: Lease Name: MCINTYRE-FEDERAL Operator: ARCO OIL & GAS CORP Field: LOCO HILLS Geologic Province: PERMIAN BASIN Depth Total Driller: 11244 Depth Total Logger: Depth True Vertical: Formation at TD: MORROW Producing Formation: Date of Abandonment: GO-TECH - Operator: ARCO OIL & GAS CO GO-TECH - Well Name: MC INTYRE FED 008 GO-TECH - Plug Date: GO-TECH - One Producing Pool Name: CASING Size: 13 3/8 IN Depth Base: 446 Cement Amount: 425 sx Top of Cement: Circ to Surf CASING Size: 85/8 IN Depth Base: 2652 Cement Amount: 1250 sx Top of Cement: Circ to Surf Top of Cement: Circ to Surf CASING Size: 5 1/2 IN Depth Base: E+04 2250 sx Cement Amount: Test Report: Type: PRODUCTION TEST #: 1 Formation Top: MORROW Depth Top: 11003 Depth Base: 11044 Type: PRODUCTION TEST #: 2 Formation Top: MORROW Depth Top: 11003 Depth Base: Type: PRODUCTION TEST #: 3 Formation Top: MORROW Depth Top: 10828 Depth Base: Depth Base: Type: PRODUCTION TEST #: 4 Formation Top: CANYON Depth Top: 9589 Depth Base: Type: PRODUCTION TEST #: 5 Formation Top: WOLFCAMP Depth Top: 9032 Depth Base: Type: PRODUCTION TEST #: 6 Formation Top: WOLFCAMP Depth Top: 8969 8888 Depth Base: Type: PRODUCTION TEST #: 7 Formation Top: WOLFCAMP Depth Top: Test\_Perf\_Report: Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 11028 Depth Base: 11044 Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 11003 Depth Base: 11010 Type: PRODUCTION TEST #: 2 Formation Top Depth Top: 11003 Depth Base: 11044 Depth Top: 10840 Depth Base: Type: PRODUCTION TEST #: 3 Formation Top Type: PRODUCTION TEST #: 3 Formation Top Depth Top: 10828 Depth Base: Depth Base: Type: PRODUCTION TEST #: 4 Formation Top Depth Top: 9589

#: 5 Formation Top

#: 6 Formation Top

#: 7 Formation Top

#: 7 Formation Top

Type: PRODUCTION TEST

Type: PRODUCTION TEST

Type: PRODUCTION TEST

Type: PRODUCTION TEST

Type: Oil

11044

10848

9598

9046

8974

8936

10848

10836

9598

9046

8974

8936

8905

Depth Top:

Depth Top:

Depth Top:

Depth Top:

9032

8969

8918

8888

Depth Base:

Depth Base:

Depth Base:

Depth Base:

API #: 30-015-23270

IC# 300157015380

Status: Active

Type: Oil-

Surface: .

1650 FSL

1650 FEL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: HOLLY ENERGY

Lease Name: MCINTIRE `A`

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

Depth Total Logger: 6900

Depth True Vertical:

Formation at TD: ABO /SH/

Producing Formation: ABO /SH/

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: MCINTYRE A WEST 008

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS;ABO

Depth Base: 1598 Cement Amount:

CASING Size: 8 5/8 IN CASING Size: 4 1/2 IN

Depth Base: 6898

Cement Amount:

800 sx

Top of Cement: Circ to Surf

2517 sx

Top of Cement: Circ to Surf

TUBING Size: 23/8 IN

Depth Base: 6565

Cement Amount:

sx · Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: ABO /SH/

Depth Top: 6632 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

#: 1 Formation Top

Depth Top:

Depth Base: 6824

6859

Type: INITIAL POTENTIAL Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: Depth Top:

6698 Depth Base: 6632 Depth Base:

UWI: 30015233820000 300157025180 Type: Oil API #: 30-015-23382 IC# Status: Plugged Surface: 990 FSL 2460 FEL Section: 20 Township 17 South Range 30 East Eddy County New Mexico Bottom Hole: Section: Operator: HOLLY ENERGY Lease Name: MCINTYRE 'A' Well #: 10 Field: GRAYBURG JACK Geologic Province: PERMIAN BASIN Depth Total Driller: 4700 Depth Total Logger: Depth True Vertical: Date of Abandonment: 2/8/2002 Formation at TD: PADDOCK Producing Formation: SAN ANDRES D GO-TECH - Operator: MACK ENERGY CORP GO-TECH - Well Name: MCINTYRE A 010 GO-TECH - Plug Date: 9/20/1996 GO-TECH - One\_Producing\_Pool\_Name: CASING Size: 8 5/8 IN Depth Base: 510 Cement Amount: 215 sx Top of Cement: Circ to Surf CASING 4700 Size: 4 1/2 IN Depth Base: Cement Amount: 2777 sx Top of Cement: 1100 TUBING Size: 23/8 IN Depth Base: 3090 Cement Amount: Top of Cement: Test\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top: SAN ANDRES D Depth Top: 3092 Depth Base: 3097 4670 Type: PRODUCTION TEST 1 Formation Top: **PADDOCK** Depth Top: 4604 Depth Base: 4510 Type: PRODUCTION TEST #: 2 Formation Top: **PADDOCK** Depth Top: 4475 Depth Base: Type: PRODUCTION TEST #: 3 Formation Top: SAN ANDRES D Depth Top: 4008 Depth Base: 4096 Depth Top: Type: PRODUCTION TEST #: 4 Formation Top: SAN ANDRES D 3523 Depth Base: 3668 Type: PRODUCTION TEST #: 5 Formation Top: SAN ANDRES D Depth Top: 3272 Depth Base: 3437 Test\_Perf\_Report: Type: INITIAL POTENTIAL Depth Base: 3097 #: 1 Formation Top Depth Top: 3092 Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 4604 Depth Base: 4619 Type: PRODUCTION TEST 1 Formation Top Depth Top: 4626 Depth Base: 4634 Type: PRODUCTION TEST Depth Top: Depth Base: 4646 #: 1 Formation Top 4636 Type: PRODUCTION TEST 1 Formation Top Depth Top: Depth Base: 4670 4660 Type: PRODUCTION TEST Depth Base: 4479 #: 2 Formation Top Depth Top: 4475 #: 2 Formation Top 4491 Type: PRODUCTION TEST Depth Top: 4489 Depth Base: Depth Base: 4501 Type: PRODUCTION TEST #: 2 Formation Top Depth Top: 4495 4510 Type: PRODUCTION TEST #: 2 Formation Top Depth Top: 4505 Depth Base: 4056 Type: PRODUCTION TEST #: 3 Formation Top Depth Top: 4052 Depth Base: 4014 Type: PRODUCTION TEST #: 3 Formation Top Depth Top: 4008 Depth Base: 4030 Type: PRODUCTION TEST #: 3 Formation Top 4018 Depth Base: Depth Top: 4048 Type: PRODUCTION TEST #: 3 Formation Top Depth Top: 4045 Depth Base: 4066 Type: PRODUCTION TEST #: 3 Formation Top Depth Top: 4060 Depth Base: Type: PRODUCTION TEST #: 3 Formation Top Depth Top: 4069 Depth Base: 4071 Type: PRODUCTION TEST #: 3 Formation Top Depth Top: 4076 Depth Base: 4079 Type: PRODUCTION TEST #: 3 Formation Top Depth Top: 4087 Depth Base: 4089 Type: PRODUCTION TEST 4092 Depth Base: 4096 #: 3 Formation Top Depth Top: 4036 Type: PRODUCTION TEST #: 3 Formation Top Depth Top: 4032 Depth Base: Type: PRODUCTION TEST #: 4 Formation Top Depth Top: 3523 Depth Base: 3526 Type: PRODUCTION TEST #: 4 Formation Top Depth Top: 3531 Depth Base: 3550 Type: PRODUCTION TEST #: 4 Formation Top Depth Top: 3563 Depth Base: 3565 3581 Type: PRODUCTION TEST #: 4 Formation Top Depth Top: 3578 Depth Base: Type: PRODUCTION TEST #: 4 Formation Top 3662 Depth Base: 3668 Depth Top:

Depth Top:

3272

Depth Base:

3437

Type: PRODUCTION TEST

#: 5 Formation Top

UWI: 30015234070000 API #: 30-015-23407 Status: Active Type: Oil Surface: 2400 FSL 1600 FEL Section: 20 Township 17 South Range 30 East Eddy County New Mexico Bottom Hole: Section: Operator: MACK ENERGY CORP Lease Name: MCINTYRE 'A' Well #: 9 Field: LOCO HILLS Geologic Province: PERMIAN BASIN Depth Total Driller: Depth Total Logger: Depth True Vertical: 4715 Formation at TD: PADDOCK Producing Formation: PADDOCK Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: MCINTYRE A WEST 009 GO-TECH - Plug Date: GO-TECH - One Producing Pool Name: LOCO HILLS; PADDOCK CASING Size: 8 5/8 IN 315 sx Top of Cement: Circ to Surf Depth Base: 508 Cement Amount: CASING Size: 4 1/2 IN Depth Base: 4715 2150 sx Top of Cement: 1150 Cement Amount: TUBING Size: 2 3/8 JN Depth Base: 3355 Cement Amount: Top of Cement: SX TUBING Size: 23/8 IN Depth Base: 4671 Top of Cement: Cement Amount: SX Test Report: Type: INITIAL POTENTIAL 3372 #: 1 Formation Top: Depth Top: 2901 Depth Base: SAN ANDRES D Type: INITIAL POTENTIAL #: 2 Formation Top: PADDOCK Depth Top: 4372 Depth Base: 4660 Type: PRODUCTION TEST #: 1 Formation Top: SAN ANDRES Depth Top: 2901 Depth Base: 3372 Type: PRODUCTION TEST #: 1 Formation Top: SAN ANDRES D Depth Top: 3826 Depth Base: 3883 Type: PRODUCTION TEST #: 2 Formation Top: SAN ANDRES D Depth Top: 3223 Depth Base: 3372 Type: PRODUCTION TEST #: 3 Formation Top: SAN ANDRES D Depth Top: 2901 Depth Base: 2988 Test Perf Report: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 2901 Depth Base: 3372 Type: INITIAL POTENTIAL #: 2 Formation Top Depth Top: 4372 Depth Base: 4660 Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 3863 Depth Base: 3863 Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 2901 Depth Base: 3372 Type: PRODUCTION TEST #: 1 Formation Top 3883 3883 Depth Top: Depth Base: Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 3879 Depth Base: 3879 Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 3867 Depth Base: 3867 Type: PRODUCTION TEST 3859 #: 1 Formation Top Depth Top: 3859 Depth Base: Type: PRODUCTION TEST 1 Formation Top Depth Top: 3855 Depth Base: 3855 Type: PRODUCTION TEST 1 Formation Top Depth Top: 3851 Depth Base: 3851 #: Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 3841 Depth Base: 3841 Type: PRODUCTION TEST 1 Formation Top Depth Top: 3836 Depth Base: 3836 Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 3830 Depth Base: 3830 Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 3826 Depth Base: 3826 Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 3871 Depth Base: 3871 Type: PRODUCTION TEST #: 2 Formation Top Depth Top: 3285 Depth Base: 3285 Type: PRODUCTION TEST #: 2 Formation Top 3223 Depth Top: 3223 Depth Base: Type: PRODUCTION TEST #: 2 Formation Top Depth Top: 3228 Depth Base: 3228 Type: PRODUCTION TEST #: 2 Formation Top Depth Top: 3257 Depth Base: 3257 Type: PRODUCTION TEST #: 2 Formation Top Depth Top: 3263 Depth Base: 3263 Type: PRODUCTION TEST #: 2 Formation Top Depth Top: 3268 Depth Base: 3268 Type: PRODUCTION TEST #: 2 Formation Top Depth Top: 3334 Depth Base: 3334 #: 2 Formation Top 3372 Type: PRODUCTION TEST Depth Top: Depth Base: 3372 Type: PRODUCTION TEST #: 2 Formation Top Depth Top: 3362 Depth Base: 3362 Type: PRODUCTION TEST #: 2 Formation Top 3360 Depth Base: 3360 Depth Top: Type: PRODUCTION TEST #: 2 Formation Top Depth Top: 3274 Depth Base: 3274 #: 2 Formation Top Type: PRODUCTION TEST Depth Top: 3340 Depth Base: 3340 Type: PRODUCTION TEST #: 2 Formation Top Depth Top: 3277 Depth Base: 3277 Type: PRODUCTION TEST Depth Top: Depth Base: 3329

#: 2 Formation Top

## UWI: 30015234070000 API #: 30-015-23407 CONTINUATION SHEET

Type: PRODUCTION TEST	#: 2 Formation Top	Depth Top:	3325	Depth Base:	3325
Type: PRODUCTION TEST	#: 2 Formation Top	Depth Top:	3318	Depth Base:	3318
Type: PRODUCTION TEST	#: 2 Formation Top	Depth Top:	3311	Depth Base:	3311
Type: PRODUCTION TEST	#: 2 Formation Top	Depth Top:	3301	Depth Base:	3301
Type: PRODUCTION TEST	#: 2 Formation Top	Depth Top:	3296	Depth Base:	3296
Type: PRODUCTION TEST	#: 2 Formation Top	Depth Top:	3291	Depth Base:	3291
Type: PRODUCTION TEST	#: 2 Formation Top	Depth Top:	3347	Depth Base:	3347
Type: PRODUCTION TEST	#: 3 Formation Top	Depth Top:	2901	Depth Base:	2904
Type: PRODUCTION TEST	#: 3 Formation Top	Depth Top:	2911	Depth Base:	2915
Type: PRODUCTION TEST	#: 3 Formation Top	Depth Top:	2976	Depth Base:	2978
Type: PRODUCTION TEST	#: 3 Formation Top	Depth Top:	2982	Depth Base:	2988

UWI: 30015274720000 Status: Active Section: 17 Township 17 South Range 30 East Eddy County New Mexico Surface: 1650 FWL 330 FSL Bottom Hole: Section: Lease Name: MCINTYRE 'DK' FEDE Operator: MACK ENERGY CORP Field: LOCO HILLS Geologic Province: PERMIAN BASIN Depth Total Driller: 5100 Depth Total Logger: Depth True Vertical: Formation at TD: PADDOCK Producing Formation: PADDOCK Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: MCINTYRE DK FEDERAL 008 GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK CASING Size: 13 3/8 IN 300 sx Top of Cement: Circ to Surf Depth Base: 251 Cement Amount: CASING Size: 8 5/8 IN Depth Base: 1055 Cement Amount: 625 sx Top of Cement: 290' From Surf CASING Size: 5 1/2 IN Depth Base: 5089 Cement Amount: 1320 sx Top of Cement: Circ to Surf TUBING Size: 27/8 IN Depth Base: 3942 Top of Cement: Cement Amount: SX TUBING Size: 27/8 IN Depth Base: 5022 Top of Cement: Cement Amount: Test Report: Type: INITIAL POTENTIAL #: 1 Formation Top: **PADDOCK** Depth Top: 4217 Depth Base: Type: INITIAL POTENTIAL #: 1 Formation Top: SAN ANDRES D Depth Top: 3012 Depth Base: Type: PRODUCTION TEST #: 1 Formation Top: SAN ANDRES D Depth Top: 3012 Depth Base: Test\_Perf\_Report: 4217 Depth Base: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 3763 Depth Base:

#: 1 Formation Top

#: 1 Formation Top

Type: INITIAL POTENTIAL

Type: PRODUCTION TEST

Well #:

5004 3909

3909

5004

3909

3627 3909

Depth Top:

Depth Top:

3012

Depth Base:

3012 Depth Base:

UWI: 30015274760000 API #: 30-015-27476 IC# 300157014898 Type: Oil Status: Active Surface: 330 FSL 330 FWL Section: 17 Township 17 South Range 30 East Eddy County New Mexico Bottom Hole: Section: Operator: MACK ENERGY CORP Lease Name: MCINTYRE 'DK' FEDE Well #: Field: LOCO HILLS Geologic Province: PERMIAN BASIN Depth Total Driller: 5113 Depth Total Logger: Depth True Vertical: Formation at TD: PADDOCK Producing Formation: PADDOCK Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: MCINTYRE DK FEDERAL 007 GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK CASING Size: 13 3/8 IN 255 Depth Base: Cement Amount: 300 sx Top of Cement: Surface CASING Size: 8 5/8 IN Depth Base: 1036 Cement Amount: 700 sx Top of Cement: Surface CASING Size: 5 1/2 IN Depth Base: 5099 Cement Amount: 1320 sx Top of Cement: Surface TUBING Size: 27/8 IN Depth Base: 3965 Top of Cement: Cement Amount: SX TUBING Size: 27/8 IN Depth Base: 4541 Cement Amount: Top of Cement: SX Test\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top: PADDOCK Depth Top: 4202 Depth Base: 4491 Type: INITIAL POTENTIAL #: 1 Formation Top: SAN ANDRES D Depth Top: 2995 Depth Base: 3951 Type: PRODUCTION TEST SAN ANDRES D 2995 Depth Base: #: 1 Formation Top: Depth Top: 3951 Test\_Perf\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top 4202 Depth Base: 4491 Depth Top: Depth Base: Type: INITIAL POTENTIAL #: 1 Formation Top 3951 Depth Top: 3771 Type: INITIAL POTENTIAL 2995 Depth Base: #: 1 Formation Top Depth Top: 3610

2995 Depth Base:

Depth Top:

3951

Type: PRODUCTION TEST

#: 1 Formation Top

API #: 30-015-27645

IC# 300157039993

Status: Active

Type: Oil

Surface:

330 FNL

330 FEL

Section: 19 Township 17 South Range 30 East Eddy County New Mexico

**Bottom Hole:** 

Section:

Operator: MARBOB ENERGY CORP

Lease Name: BURCH-KEELY UNIT

Well #: 225

Field: GRÁYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

5050 Depth Total Logger: Depth True Vertical:

Formation at TD: SAN ANDRES D

Producing Formation: SAN ANDRES D

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: BURCH KEELY UNIT 225

GO-TECH - Plug Date: CASING Size: 8 5/8 IN

Depth Base: 427

Cement Amount:

Top of Cement: Circ to Pit 350 sx

CASING Size: 5 1/2 IN

Depth Base: 5050

1540 sx

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

Top of Cement: Circ to Pit

Depth Top: 4160 Depth Base:

Cement Amount:

TUBING Size: 27/8 IN

Depth Base: 4647

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: SAN ANDRES D

4558

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top:

4313 Depth Base:

4558

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top:

4160 Depth Base:

UWI: 30015276460000 Surface: Bottom Hole: Operator: MARBOB ENERGY CORP

API #: 30-015-27646 IC#

Status: Active 19 Township 17 South Range 30 East Eddy County New Mexico

Type: Oil

1650 FNL Section: 330 FEL.

Section:

Field: GRAYBURG JACK

Lease Name: BURCH-KEELY UNIT

Well #: 242

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4820 Depth Total Logger: Depth True Vertical:

Formation at TD: SAN ANDRES D

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

Producing Formation: SAN ANDRES D

GO-TECH - Well Name: **BURCH KEELY UNIT 242** 

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

CASING Size: 85/8 IN CASING Size: 5 1/2 IN Depth Base: 413 Cement Amount: Depth Base: 4799 Cement Amount:

400 sx Top of Cement: Circ 1450 sx Top of Cement: Circ to Pit

TUBING Size: 27/8 IN

Depth Base: 4496 Cement Amount: Top of Cement:

SX

TUBING Size: 27/8 IN

Depth Base:

4665 Cement Amount: Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: SAN ANDRES D

Depth Top:

2577 Depth Base:

4608

Type: INITIAL POTENTIAL

#: 1 Formation Top: SAN ANDRES D

Depth Top:

4434 Depth Base: 4608

Test\_Perf\_Report:

#: 1 Formation Top

#: 1 Formation Top

Depth Top: Depth Top: 3808

4434 Depth Base: 4608 Depth Base: 3923

Type: INITIAL POTENTIAL Type: INITIAL POTENTIAL

#: 1 Formation Top #: 1 Formation Top

Depth Top: 3157 Depth Base: Depth Top: 2577 Depth Base:

3238 2802

Type: INITIAL POTENTIAL Type: INITIAL POTENTIAL

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4434 Depth Base:

API #: 30-015-28089

IC# 300157031994

Status: Active

Type: Oil

Surface:

1980 FNL

1345 FEL

Section:

19 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: BURCH-KEELY UNIT

Well #: 244

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4740 Depth Total Logger: Depth True Vertical:

Formation at TD: SAN ANDRES D

Producing Formation: GRAYBURG

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: BURCH KEELY UNIT 244

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

CASING Size: 8 5/8 IN CASING Size: 5 1/2 IN Depth Base:

407 Cement Amount: 4736 Cement Amount:

350 sx Top of Cement: Circ 1050 sx

Depth Base:

Top of Cement: Circ

TUBING Size: 27/8 IN

Depth Base:

4656 Cement Amount: Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: GRAYBURG

Depth Top: 2581 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top:

4404 Depth Base: 4618

Type: INITIAL POTENTIAL Type: INITIAL POTENTIAL #: 1 Formation Top #: 1 Formation Top Depth Top:

3102 Depth Base: 3356

Depth Top: 2581 Depth Base:

API #: 30-015-28155

IC# 300157038094

Status: Active

Type: Oil

Surface:

1650 FSL 2310 FEL

Section: 19 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: BURCH-KEELY UNIT

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

400 sx

1875 sx

Depth Total Driller:

4800 Depth Total Logger: Depth True Vertical:

Formation at TD: SAN ANDRES D

Producing Formation: SAN ANDRES D

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: BURCH KEELY UNIT 229

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

CASING Size: 8 5/8 IN

Depth Base:

399 Cement Amount: Top of Cement: Circ to Surf

CASING Size: 5 1/2 IN

Depth Base: 4784

Cement Amount:

Top of Cement: Circ to Surf

TUBING Size: 27/8 IN

Depth Base: 4286

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: SAN ANDRES D

Depth Top: 4264 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4264 Depth Base:

API #: 30-015-28333

IC# 300157001395

Status: Active

Type: Oil

Surface:

2615 FSL

1980 FEL

Section: 19 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: BURCH KEELY UNIT

Well #: 262

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

Depth Total Logger: 4740

Depth True Vertical:

Formation at TD: SAN ANDRES D

Producing Formation: SAN ANDRES D

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

GO-TECH - Well Name: BURCH KEELY UNIT 262

CASING Size: 85/8 IN

Depth Base: 414 Cement Amount: Top of Cement:

CASING Size: 5 1/2 IN

Depth Base: 4736 Cement Amount:

2100 sx Top of Cement:

TUBING Size: 27/8 IN

Depth Base: 4343 Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: SAN ANDRES D Type: PRODUCTION TEST #: 1 Formation Top: SAN ANDRES D Depth Top: 4237 Depth Base: 4237 Depth Base: Depth Top:

4572

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top:

Depth Base: 4237

4572

Type: PRODUCTION TEST

#: 1 Formation Top

Depth Top:

4237 Depth Base:

API #: 30-015-29035

IC# 300157023996

Status: Active

Type: Oil

Surface:

2540 FSL 1420 FEL

Section:

18 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: BURCH KEELY UNIT

Well #: 257

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4875 Depth Total Logger: Depth True Vertical:

Producing Formation: SAN ANDRES D

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

Formation at TD: SAN ANDRES D

GO-TECH - Plug Date:

GO-TECH - Well Name: BURCH KEELY UNIT 257

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

CASING Size: 8 5/8 IN

Depth Base: 408 Depth Base: 4846 Cement Amount: Cement Amount:

400 sx

Top of Cement: Circ to Surf

CASING Size: 5 1/2 IN

2250 sx

Top of Cement: Circ to Surf

TUBING Size: 27/8 IN Depth Base: 4120 Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: SAN ANDRES D

Depth Top: 4220 Depth Base: 4457

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4220 Depth Base:

API#: 30-015-29038

IC# 300157024096

Status: Active

Type: Oil

Surface:

1980 FSL

1220 FEL Section:

19 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: BURCH KEELY UNIT

Well #:

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4787 Depth Total Logger: Depth True Vertical:

Formation at TD: SAN ANDRES D

Producing Formation: SAN ANDRES D

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Plug Date:

GO-TECH - One\_Producing Pool Name: GRAYBURG JACKSON; SR-Q-G-SA

GO-TECH - Well Name: BURCH KEELY UNIT 265

Depth Base: 423 Cement Amount:

Top of Cement: Circ to Surf

CASING Size: 8 5/8 IN CASING Size: 5 1/2 IN

Depth Base: 4787

Cement Amount:

350 sx 1775 sx

Top of Cement: Circ to Surf

TUBING Size: 27/8 IN

Depth Base: 4656

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL Type: PRODUCTION TEST

#: 1 Formation Top: SAN ANDRES D

#: 1 Formation Top: SAN ANDRES D

Depth Top: 4294 Depth Base:

4592

4294 Depth Base: Depth Top:

4592

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4294 Depth Base: 4592

Type: PRODUCTION TEST

#: 1 Formation Top

Depth Top: 4294

Depth Base:

API #: 30-015-29388

IC# 300157004497

Status: Active

Type: Oil

Surface:

1650 FWL Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: JENKINS 'B' FEDERA

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4799 Depth Total Logger: 4796

Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

GO-TECH - Well Name: JENKINS B FEDERAL 008

CASING Size: 8 5/8 IN

Depth Base: 470 Cement Amount: 350 sx Top of Cement: Circ

CASING Size: 5 1/2 IN

Depth Base: 4783

1150 sx Top of Cement: Circ to Pit

Cement Amount: Depth Base: 4743 Cement Amount:

Top of Cement:

TUBING Size: 27/8 IN

Test\_Report:

Type: INITIAL POTENTIAL #: 1 Formation Top: PADDOCK

Depth Top: 4331 Depth Base: 4729

Test\_Perf\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top

Depth Top: 4331 Depth Base:

UWI: 30015293890000 API#: 30-015-29389 IC# Type: Oil Status: Active Surface: 2183 FSL 990 FWL Section: 20 Township 17 South Range 30 East Eddy County New Mexico **Bottom Hole:** Section: Operator: MACK ENERGY CORP Lease Name: MCINTYRE B FEDERA Well #: 5 Field: GRAYBURG JACK Geologic Province: PERMIAN BASIN Depth Total Driller: Depth Total Logger: Depth True Vertical: 4845 Formation at TD: PADDOCK Producing Formation: SAN ANDRES Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: MCINTYRE B 005 GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK GO-TECH - Plug Date: Size: 8 5/8 IN Top of Cement: Circ to Surf CASING Depth Base: 443 Cement Amount: 350 sx Size: 5 1/2 IN Top of Cement: Circ CASING Depth Base: 4835 Cement Amount: 1270 sx TUBING Size: 27/8 IN Depth Base: 4742 Cement Amount: Top of Cement: SX 4745 Top of Cement: TUBING Size: 23/8 IN Depth Base: Cement Amount: Test\_Report: **PADDOCK** 4709 Type: INITIAL POTENTIAL #: 1 Formation Top: Depth Top: 4338 Depth Base: Type: INITIAL POTENTIAL #: 4 Formation Top: SAN ANDRES Depth Top: 3138 Depth Base: 4709 Type: PRODUCTION TEST #: 1 Formation Top: SAN ANDRES Depth Top: 3940 Depth Base: 3963 Type: PRODUCTION TEST #: 2 Formation Top: SAN ANDRES Depth Base: 3566 Depth Top: 3406 Type: PRODUCTION TEST #: 3 Formation Top: SAN ANDRES Depth Top: 3138 Depth Base: 3315 Test\_Perf\_Report: Type: INITIAL POTENTIAL Formation Top Depth Top: 4423 Depth Base: 4423 Type: INITIAL POTENTIAL Formation Top Depth Top: 4338 Depth Base: 4338 Type: INITIAL POTENTIAL 4501 Formation Top Depth Top: 4501 Depth Base: Type: INITIAL POTENTIAL 4479 #: 1 Formation Top Depth Top: 4479 Depth Base: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4477 Depth Base: 4477 Type: INITIAL POTENTIAL Formation Top Depth Top: 4475 Depth Base: 4475 Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4474 Depth Base: 4474 Type: INITIAL POTENTIAL Depth Base: #: Formation Top Depth Top: 4471 4471 Type: INITIAL POTENTIAL Formation Top Depth Top: 4469 Depth Base: 4469 Type: INITIAL POTENTIAL #• Formation Top Depth Top: 4463 Depth Base: 4463 Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4461 Depth Base: 4461 Type: INITIAL POTENTIAL Formation Top Depth Top: 4440 Depth Base: 4440 Type: INITIAL POTENTIAL Depth Base: 4437 #: Formation Top Depth Top: 4437 Type: INITIAL POTENTIAL #: Formation Top Depth Top: 4531 Depth Base: 4531 Type: INITIAL POTENTIAL #: Formation Top Depth Top: 4426 Depth Base: 4426 Type: INITIAL POTENTIAL #: 4556 Formation Top Depth Top: 4556 Depth Base: 1 Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4421 Depth Base: 4421 Type: INITIAL POTENTIAL Formation Top Depth Top: 4414 Depth Base: 4414 Type: INITIAL POTENTIAL #: Formation Top Depth Top: 4411 Depth Base: 4411 Type: INITIAL POTENTIAL Formation Top Depth Top: 4382 Depth Base: 4382 Type: INITIAL POTENTIAL #: Formation Top Depth Top: 4380 Depth Base: 4380 Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4362 Depth Base: 4362 Type: INITIAL POTENTIAL Formation Top Depth Top: 4356 Depth Base: 4356 Type: INITIAL POTENTIAL Formation Top Depth Top: 4354 Depth Base: 4354 Type: INITIAL POTENTIAL Formation Top Depth Top: 4350 Depth Base: 4350 Type: INITIAL POTENTIAL #: Formation Top Depth Top: 4347 Depth Base: 4347 1 Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4345 Depth Base: 4345 Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4343 Depth Base: 4343 Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4433 Depth Base: 4433 Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4637 Depth Base: 4637

## UWI: 30015293890000 API #: 30-015-29389 CONTINUATION SHEET

Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4709	Depth Base:	4709
Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4699	Depth Base:	4699
Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4691	Depth Base:	4691
Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4689	Depth Base:	4689
Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4687	Depth Base:	4687
Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4670	Depth Base:	4670
Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4667	Depth Base:	4667
Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4662	Depth Base:	4662
Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4661	Depth Base:	4661
Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4528	Depth Base:	4528
Type: INITIAL POTENTIAL	#: 1 Formation Top	. •	Depth Top:	4639	Depth Base:	4639
Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4583	Depth Base:	4583
Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4559	Depth Base:	4559
Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4560	Depth Base:	4560
Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4562	Depth Base:	4562
Type: INITIAL POTENTIAL	#: 1 Formation Top	•	Depth Top:	4659	Depth Base:	4659
Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4579	Depth Base:	4579
Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4634	Depth Base:	4634
Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4586	Depth Base:	4586
Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4600	Depth Base:	4600
Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4617	Depth Base:	4617
Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4621	Depth Base:	4621
Type: INITIAL POTENTIAL	#: 1 Formation Top	•	Depth Top:	4632	Depth Base:	4632
Type: INITIAL POTENTIAL	#: 1 Formation Top		Depth Top:	4577	Depth Base:	4577
Type: INITIAL POTENTIAL	#: 4 Formation Top		Depth Top:	3138	Depth Base:	3963
Type: INITIAL POTENTIAL	#: 4 Formation Top		Depth Top:	4338	Depth Base:	4709
Type: PRODUCTION TEST	#: 1 Formation Top		Depth Top:	3940	Depth Base:	3963
Type: PRODUCTION TEST	#: 3 Formation Top		Depth Top:	3138	Depth Base:	3315

API #: 30-015-29423

IC#

Status: Active

Type: Oil

Surface:

330 FSL

990 FEL

17 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section: Section:

Operator: COG OPERATING LLC

Lease Name: MCINTYRE DK FEDER

Well #:

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4810 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PERMIAN UPPE

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: MCINTYRE DK FEDERAL 009

GO-TECH - Plug Date:

Depth Base: 456

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 85/8 IN CASING Size: 5 1/2 IN Cement Amount: Cement Amount: 300 sx Top of Cement: Circ

Depth Base: 47.22 1435 sx

Top of Cement: Circ

TUBING Size: 27/8 IN

Depth Base: 4605 Cement Amount:

Top of Cement: SX

TUBING Size: 27/8 IN

4639

Depth Base:

Cement Amount:

Top of Cement:

Type: INITIAL POTENTIAL

#: 1 Formation Top:

PERMIAN UPPER Depth Top: 4609

Type: INITIAL POTENTIAL

#: 1 Formation Top:

**PADDOCK** 

2771 Depth Base: Depth Top: 4246 Depth Base:

4609

Test\_Perf\_Report:

Test Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4246 Depth Base:

4609

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 2771 Depth Base:

4014

Type: INITIAL POTENTIAL #: 1 Formation Top

Depth Top: 4246 Depth Base:

UWI: 30015294240000 API #: 30-015-29424 Status: Active Type: Oil 1610 FEL Surface: 990 FSL Section: 17 Township 17 South Range 30 East Eddy County New Mexico Bottom Hole: Section: Operator: MACK ENERGY CORP Lease Name: MCINTYRE DK FEDER 10 Well #: Field: GRAYBURG JACK Geologic Province: PERMIAN BASIN Depth Total Driller: 4761 Depth Total Logger: Depth True Vertical: Formation at TD: PADDOCK Producing Formation: SAN ANDRES Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: MCINTYRE DK FEDERAL 010 GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK CASING Size: 85/8 IN Depth Base: 453 Cement Amount: Top of Cement: Circ to Pit 325 sx CASING Size: 5 1/2 IN Depth Base: 4722 Cement Amount: Top of Cement: Circ 1450 sx TUBING Size: 27/8 IN Depth Base: 4617 Cement Amount: Top of Cement: SX TUBING Size: 27/8 IN 4617 Depth Base: Cement Amount: Top of Cement: Test\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top: PADDOCK 4410 Depth Base: 4603 Depth Top: Type: INITIAL POTENTIAL #: 3 Formation Top: SAN ANDRES Depth Top: 3007 Depth Base: 4603 3322 Depth Base: Type: PRODUCTION TEST #: 1 Formation Top: SAN ANDRES 3520 Depth Top: Type: PRODUCTION TEST #: 2 Formation Top: SAN ANDRES Depth Top: 3007 Depth Base: 3219 Test\_Perf\_Report: Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4410 Depth Base: 4603 Type: INITIAL POTENTIAL 4603 #: 3 Formation Top Depth Top: 4410 Depth Base: Type: INITIAL POTENTIAL #: 3 Formation Top Depth Top: 3007 Depth Base: 3520 Type: PRODUCTION TEST #: 1 Formation Top Depth Top: 3322 Depth Base: 3520

Depth Top:

3007 Depth Base:

3219

Type: PRODUCTION TEST #: 2 Formation Top

UWI: 30015294250000 API#: 30-015-29425 Status: Active

Surface: 2135 FSL 2310 FWL Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Type: Oil

4188

Bottom Hole; Section:

Operator: COG OPERATING LLC Lease Name: MCINTYRE WD Well #:

Field: GRAYBURG JACK Geologic Province: PERMIAN BASIN

Depth Total Driller: 4840 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK Producing Formation: PADDOCK Date of Abandonment: GO-TECH - Operator: COG OPERATING LLC GO-TECH - Well Name: W D MCINTYRE E 003

GO-TECH - Plug Date: GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 8 5/8 IN Depth Base: 454 Cement Amount: 325 sx Top of Cement: Circ CASING Size: 5 1/2 IN Depth Base: 4835 Cement Amount: 1025 sx Top of Cement: Circ

TUBING Size: 27/8 IN Depth Base: 4765 Cement Amount: Top of Cement: TUBING Size: 27/8 IN Depth Base: 4796 Cement Amount: Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL #: 1 Formation Top: PADDOCK Depth Top: 4344 Depth Base: 4769 Type: INITIAL POTENTIAL #: 1 Formation Top: PADDOCK Depth Top: 4344 Depth Base: 4769

Type: INITIAL POTENTIAL #: 2 Formation Top: SAN ANDRES Depth Top: 2997 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4344 Depth Base: 4769 Type: INITIAL POTENTIAL #: 1 Formation Top Depth Top: 4344 Depth Base: 4769 Type: INITIAL POTENTIAL #: 2 Formation Top Depth Top: 2997 Depth Base: 4188

API #: 30-015-29426

IC#

Status: Active

Type: Oil

Surface:

990 FNL

990 FEL Section:

20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: COG OPERATING LLC

Lease Name: MCINTYRE W D 'C'

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

Depth Total Logger:

Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: SAN ANDRES

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

4832

GO-TECH - Well Name: W D MCINTYRE C 004

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 8 5/8 IN

Depth Base: 464 Cement Amount:

400 sx Top of Cement: 30

CASING Size: 5 1/2 IN

Depth Base: 4722

Cement Amount:

Top of Cement: Circ 1265 sx

TUBING Size: 27/8 IN

Depth Base: 4255

Cement Amount:

Top of Cement:

TUBING Size: 27/8 IN

Depth Base: 4667

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: SAN ANDRES

Depth Top:

3358 Depth Base:

4106

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4250 Depth Base:

4651

Test\_Perf\_Report:

Type: INITIAL POTENTIAL Type: INITIAL POTENTIAL #: 1 Formation Top #: 1 Formation Top Depth Top: 3358 Depth Base:

4106

Depth Top:

4250 Depth Base:

API #: 30-015-29451

IC# 300157005797

Status: Active

Type: Oil

Surface:

1650 FNL 1090 FWL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: JENKINS 'B' FEDERA

Weil #: 7

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

Depth Total Logger: 4810

Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: JENKINS B FEDERAL 007

GO-TECH - Plug Date:

415 Depth Base: Cement Amount:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 8 5/8 IN CASING Size: 5 1/2 IN

300 sx

Top of Cement: Circ

Depth Base: 4796

1415 sx

Top of Cement: Circ

TUBING Size: 27/8 IN

Depth Base: 4653

Cement Amount: Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4289 Depth Base:

4634

Type: PRODUCTION TEST

#: 1 Formation Top: PADDOCK

Depth Top: 4289 Depth Base:

4634

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top:

4289 Depth Base:

4634

Type: PRODUCTION TEST #: 1 Formation Top

Depth Top:

4289 Depth Base:

API #: 30-015-29510

Status: Active

Type: Oil

Surface:

2515 FNL

330 FEL

19 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole: Operator:

Section: Section:

Well #:

Field:

Geologic Province:

Lease Name:

Depth Total Driller:

Depth Total Logger:

Depth True Vertical:

Formation at TD:

Producing Formation:

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: BURCH KEELY UNIT 269

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

CASING Size: 8 5/8 IN CASING Size: 5 1/2 IN Depth Base: 422 350 sx

Top of Cement: Circ to Surf

Depth Base: 4791

Cement Amount: 1250 sx Top of Cement: Circ to Surf

TUBING Size: 27/8 IN

Depth Base: 4237

Cement Amount:

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top:

Depth Top: 4290 Depth Base:

4630

SAN ANDRES D Type: PRODUCTION TEST #: 1 Formation Top: SAN ANDRES D

Depth Top: 4290 Depth Base:

4630

Test\_Perf\_Report:

Type: INITIAL POTENTIAL Type: PRODUCTION TEST #: 1 Formation Top #: 1 Formation Top

Depth Top:

4290 Depth Base:

Depth Top: 4290 Depth Base:

API #: 30-015-29529

330 FEL .

IC# 300157021797

Status: Active 19 Township 17 South Range 30 East Eddy County New Mexico

Type: Oil

Surface: Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

1675 FSL

Lease Name: BURCH KEELY UNIT

Well #: 270

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4850 Depth Total Logger:

Section:

Depth True Vertical:

Formation at TD: SAN ANDRES D

Producing Formation: SAN ANDRES D

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: BURCH KEELY UNIT 270

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

Depth Base: 389 Cement Amount:

350 sx

Top of Cement: Circ to Surf

CASING Size: 8 5/8 IN CASING Size: 5 1/2 IN

Depth Base: 4805

Cement Amount: 1310 sx Top of Cement: Circ to Surf

TUBING Size: 27/8 IN

Depth Base: 4270

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: SAN ANDRES D

Depth Top: 4345 Depth Base:

4683

Type: PRODUCTION TEST

#: 1 Formation Top: SAN ANDRES D

Depth Top: 4345 Depth Base:

4683

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4345 Depth Base:

4683

Type: PRODUCTION TEST #: 1 Formation Top

Depth Top:

4345 Depth Base:

API #: 30-015-29561

IC# 300157025297

Status: Active

Type: Oil

Surface:

990 FSL 2310 FWL

Section:

20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE W D `E`

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

5218 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: W D MCINTYRE E 004

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

Depth Base:

443 Cement Amount:

400 sx

Top of Cement: Circ

CASING Size: 85/8 IN CASING Size: 5 1/2 IN

Depth Base: 5208

Cement Amount:

1750 sx

Top of Cement: Circ

TUBING Size: 27/8 IN

Depth Base:

4695 Cement Amount: Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4463 Depth Base: 4660

.Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top:

4463 Depth Base:

API #: 30-015-29562

IC# 300157025197

Status: Active

Type: Oil

Surface:

Section:

20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE W D 'C'

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4792 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: W D MCINTYRE C 005

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 85/8 IN

Depth Base: 464 Cement Amount: 300 sx

Top of Cement: Circ

CASING Size: 5 1/2 IN

Depth Base: 4785

1095 sx

Top of Cement: Circ

Depth Top: 4334 Depth Base:

Cement Amount:

TUBING Size: 27/8 IN

Depth Base: 4751

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4334 Depth Base:

API #: 30-015-29563

IC# 300157024997

Status: Active

Type: Oil

Surface:

990 FSL

660 FEL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE 'A'

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

5176 Depth Total Logger:

5176

Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: MCINTRYE A EAST 012

GO-TECH - Plug Date:

Depth Base:

458 Cement Amount:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 8 5/8 IN CASING Size: 5 1/2 IN

Depth Base: 5111

300 sx 1325 sx

Top of Cement: Circ to Pit Top of Cement: Circ

Depth Top: 4503 Depth Base:

TUBING Size: 27/8 IN

Cement Amount: Depth Base: 4738 Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

4710

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4503 Depth Base:

API #: 30-015-29755

IC# 300157046797

Status: Active

Surface:

2310 FNL

4855

330 FWL Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: JENKINS 'B' FEDERA

4850

Well #: 9

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth True Vertical:

Depth Total Driller: Formation at TD: YESO

Producing Formation: PADDOCK

Depth Total Logger:

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

GO-TECH - Well Name: JENKINS B FEDERAL 009

CASING Size: 8 5/8 IN

Depth Base: 459 Cement Amount: 350 sx Top of Cement: Circ to Pit

CASING Size: 5 1/2 IN

Depth Base: 4854 Cement Amount: 1125 sx Top of Cement: Circ

TUBING Size: 27/8 IN

Depth Base: 4730 Cement Amount: Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4296 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4296 Depth Base:

API#: 30-015-29756

IC# 300157046897

Status: Active

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Type: Oil

Surface: Bottom Hole:

Section:

330 FWL

Operator: MACK ENERGY CORP

1650 FSL

Lease Name: MCINTYRE 'B'

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4856 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: MCINTYRE B 006

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

Depth Base:

Cement Amount: 325 sx Top of Cement:

CASING Size: 8 5/8 IN CASING Size: 5 1/2 IN

431 Depth Base: 4850 Cement Amount:

Top of Cement:

1080 sx

TUBING Size: 27/8 IN

Depth Base: 4767

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4345 Depth Base:

Test\_Perf Report:

Type: INITIAL POTENTIAL #: 1 Formation Top

Depth Top: 4345 Depth Base:

API #: 30-015-29774

IC# 300157047897

Status: Active

Surface:

1295 FSL

330 FEL

Section: 18 Township 17 South Range 30 East Eddy County New Mexico

**Bottom Hole:** 

Section:

Operator: MARBOB ENERGY CORP

Lease Name: BURCH KEELY UNIT

Well #: 275

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4748

Depth Total Logger:

4746

Depth True Vertical:

Formation at TD: SAN ANDRES D

Producing Formation: SAN ANDRES D

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: BURCH KEELY UNIT 275

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

CASING Size: 85/8 IN

Depth Base: 415 350 sx

Top of Cement: Circ to Surf

CASING Size: 5 1/2 IN

Depth Base: 4743

Cement Amount: 1370 sx

Top of Cement: Circ to Surf

Cement Amount:

TUBING Size: 27/8 IN

Depth Base: 4231

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: SAN ANDRES D

Depth Top: 4288 Depth Base: 4547

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4288 Depth Base:

API #: 30-015-29811

IC# 300157057997

Status: Active

Surface:

1295 FSL 1345 FEL

Section: 19 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: BURCH KEELY UNIT

Well #: 274

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

Depth Total Logger:

4742

Depth True Vertical:

Formation at TD: SAN ANDRES D

4751

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

Producing Formation: SAN ANDRES D

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

GO-TECH - Well Name: BURCH KEELY UNIT 274

CASING Size: 85/8 IN

Depth Base: 412

350 sx

Top of Cement: Circ to Surf

CASING Size: 5 1/2 IN

Depth Base: 4751

Cement Amount: 2000 sx Cement Amount:

Top of Cement: Circ to Surf

TUBING Size: 27/8 IN

Depth Base: 4267

Cement Amount:

Top of Cement:

Depth Top: 4316 Depth Base:

Type: INITIAL POTENTIAL

#: 1 Formation Top: SAN ANDRES D

Test\_Pert\_Report:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4316 Depth Base:

API #: 30-015-29821

IC# 300157059697

Status: Active

Type: Oil

Surface:

2040 FEL

Section:

19 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: BURCH KEELY UNIT

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4816

Depth Total Logger:

4819

Depth True Vertical:

Formation at TD: SAN ANDRES D

Producing Formation: SAN ANDRES D

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: BURCH KEELY UNIT 279

GO-TECH - Plug Date:

Depth Base: 419 Cement Amount:

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

CASING Size: 8 5/8 IN CASING Size: 5 1/2 IN

Depth Base: 4798

350 sx

Top of Cement: Top of Cement:

TUBING Size: 27/8 IN

Depth Base: 4279

Cement Amount: 1400 sx Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: SAN ANDRES D

Depth Top: 4352 Depth Base: 4713

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4352 Depth Base:

API #: 30-015-29910

IC# 300157063697

Status: Active

Surface:

2310 FNL 2310 FEL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: THUNDER ROAD FED

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4865 Depth Total Logger: 4862

Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: THUNDER ROAD FEDERAL 001

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 8 5/8 IN CASING Size: 5 1/2 IN Depth Base: 420 Cement Amount: 350 sx

Top of Cement: Circ to Surf

Depth Base: 4850 Cement Amount: 1300 sx

Top of Cement: Circ to Surf

TUBING Size: 27/8 IN

Depth Base: 4374

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4317 Depth Base:

Test\_Perf\_Report: Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4317 Depth Base:

API #: 30-015-29911

IC # 300157063797

Status: Active

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Type: Oil

Surface: Bottom Hole: 1650 FNL 1650 FEL

Section:

Lease Name: THUNDER ROAD FED

Well #: 2

Operator: MARBOB ENERGY CORP

Geologic Province: PERMIAN BASIN

Field: LOCO HILLS

Depth Total Driller:

4900 Depth Total Logger: 4897

Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: THUNDER ROAD FEDERAL 002

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

Depth Base: 405 Cement Amount: 400 sx Top of Cement: Ready Mix to Surf

CASING Size: 8 5/8 IN CASING Size: 5 1/2 IN

Depth Base: 4871 1550 sx

Cement Amount:

Top of Cement: Circ to Surf

TUBING Size: 27/8 IN

Depth Base: 4234

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4301 Depth Base: 4698

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4301 Depth Base:

API #: 30-015-29912

IC# 300157063897

Status: Active

Surface:

Bottom Hole:

2310 FEL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Section:

Well #:

Field: LOCO HILLS

Operator: MARBOB ENERGY CORP

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4900

Depth Total Logger:

4912

Lease Name: THUNDER ROAD FED

Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

GO-TECH - Operator: MARBOB ENERGY CORP

Date of Abandonment:

GO-TECH - Well Name: THUNDER ROAD FEDERAL 003

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 8 5/8 IN

Depth Base:

402 Cement Amount: 350 sx

Top of Cement: Circ to Surf

CASING Size: 5 1/2 IN

Depth Base: 4841

Cement Amount:

1675 sx

Top of Cement: Circ to Surf

TUBING Size: 27/8 IN

Depth Base: 4294

Cement Amount:

Top of Cement: SX

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4341 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4341 Depth Base:

API #: 30-015-29929

IC# 300157067197

Status: Active

Type: Oil

Surface:

660 FSL

330 FEL

Section:

19 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: BURCH KEELY UNIT

Well #: 285

Field: GRAYBURG JACK

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4900 Depth Total Logger: 4914

Depth True Vertical:

Formation at TD: SAN ANDRES D

Producing Formation: SAN ANDRES D

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Plug Date:

GO-TECH - Well Name: BURCH KEELY UNIT 285

390 Cement Amount:

GO-TECH - One\_Producing\_Pool\_Name: GRAYBURG JACKSON;SR-Q-G-SA

CASING Size: 8 5/8 IN

Depth Base:

Top of Cement: Ready Mix to Surf

CASING Size: 5 1/2 IN

Depth Base: 4893 Depth Base: 4362

Cement Amount: Cement Amount:

Top of Cement: Circ to Surf 1450 sx

Top of Cement:

TUBING Size: 27/8 IN

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: SAN ANDRES D

Depth Top: 4423 Depth Base:

4800

Test\_Perf\_Report:

Type: INITIAL POTENTIAL #: 1 Formation Top

Depth Top: 4423 Depth Base:

API #: 30-015-29952

IC# 300157063997

Status: Active

Type: Oil

Surface:

1650 FEL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: THUNDER ROAD FED Geologic Province: PERMIAN BASIN Well #:

Field: LOCO HILLS Depth Total Driller:

Depth Total Logger:

4803

Depth True Vertical:

Formation at TD: PADDOCK

4800

GO-TECH - Operator: MARBOB ENERGY CORP

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Well Name: THUNDER ROAD FEDERAL 004

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 8 5/8 IN

Depth Base: 390 Cement Amount:

400 sx

Top of Cement: Circ to Surf

CASING Size: 5 1/2 IN

Depth Base: 4780

Cement Amount:

1300 sx

Top of Cement: Circ to Surf

TUBING Size: 27/8 IN

Depth Base: 4190

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4250 Depth Base:

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4250 Depth Base:

API#: 30-015-30143

IC# 300157006598

Status: Active

Surface:

1650 FSL 2310 FEL

Section: 17 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: RED FEDERAL

Well #: 2

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4815 Depth Total Logger: 4812

Depth True Vertical:

Formation at TD: PADDOCK

Date of Abandonment:

Producing Formation: PADDOCK

GO-TECH - Plug Date:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: RED FEDERAL 002 GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 85/8 IN

Depth Base: 398

Cement Amount:

400 sx

Top of Cement: Circ to Surf

CASING Size: 5 1/2 IN

Depth Base: 4805

Cement Amount: 1175 sx Top of Cement: Circ to Surf

TUBING Size: 27/8 IN

Depth Base: 4242

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4299 Depth Base:

4557

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4299 Depth Base:

API #: 30-015-30231

IC# 300157016698

Status: Active

Type: Oil

Surface:

1650 FSL

1650 FWL Section:

17 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: BIRDIE FEDERAL

Well #:

Field: LOCO HILLS Depth Total Driller:

Geologic Province: PERMIAN BASIN

Depth True Vertical:

Depth Total Logger: 4900

4891

Date of Abandonment:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

GO-TECH - Well Name: BIRDIE FEDERAL 003

CASING Size: 8 5/8 IN

Depth Base: 401 400 sx

Top of Cement: Circ to Surf

CASING Size: 5 1/2 IN

Depth Base: 4884 Cement Amount:

Cement Amount:

1300 sx

Top of Cement: Circ to Surf

TUBING Size: 27/8 IN

Depth Base: 4183

Cement Amount:

Top of Cement:

Depth Top: 4255 Depth Base:

Test Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top:

4255 Depth Base:

API #: 30-015-30235

IC# 300157016798

Status: Active

Type: Oil

Surface:

2310 FSL

2310 FWL

Section: 17 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MARBOB ENERGY CORP

Lease Name: BIRDIE FEDERAL

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

4735 Depth Total Logger: Depth True Vertical:

Formation at TD: PADDOCK

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Well Name: BIRDIE FEDERAL 004

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO\_HILLS; PADDOCK

CASING Size: 8 5/8 IN

Depth Base: 416 Cement Amount:

CASING Size: 5 1/2 IN

400 sx Top of Cement: Circ to Surf 1150 sx Top of Cement: Circ to Surf

Depth Base: 4732 Cement Amount:

TUBING Size: 27/8 IN,

Depth Base: 4221

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4270 Depth Base: 4578

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4270 Depth Base:

API #: 30-015-30237

IC# 300157016598

Status: Active

Type: Oil

Surface:

Bottom Hole:

2310 FSL

Operator: MARBOB ENERGY CORP

990 FWL Section: 17 Township 17 South Range 30 East Eddy County New Mexico

Section:

Lease Name: BIRDIE FEDERAL

Well #:

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

Depth Total Logger: 4723

Depth True Vertical:

Formation at TD: YESO

Producing Formation: YESO

Date of Abandonment:

GO-TECH - Operator: MARBOB ENERGY CORP

GO-TECH - Plug Date:

GO-TECH - Well Name: BIRDIE FEDERAL 002

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

CASING Size: 8 5/8 IN

Depth Base: 404 400 sx

Top of Cement: Circ to Surf

CASING Size: 5 1/2 IN

Depth Base: 4720

1400 sx

Top of Cement: Circ to Surf

Cement Amount: Cement Amount:

TUBING Size: 27/8 IN

Depth Base: 4185

Cement Amount:

Top of Cement:

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: YESO

4529

Test\_Perf\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4235 Depth Base:

Depth Top: 4235 Depth Base:

API #: 30-015-30291

IC# 300157022298

Status: Active

Type: Oil

Surface:

1650 FSL

1650 FWL

Section: 20 Township 17 South Range 30 East Eddy County New Mexico

Bottom Hole:

Section:

Operator: MACK ENERGY CORP

Lease Name: MCINTYRE W D 'E'

Well #: 5

Field: LOCO HILLS

Geologic Province: PERMIAN BASIN

Depth Total Driller:

5524 Depth Total Logger: 5531

Depth True Vertical:

Formation at TD: YESO

Producing Formation: PADDOCK

Date of Abandonment:

GO-TECH - Operator: COG OPERATING LLC

GO-TECH - Well Name: W D MCINTYRE E 005

GO-TECH - Plug Date:

GO-TECH - One\_Producing\_Pool\_Name: LOCO HILLS; PADDOCK

Top of Cement: 355

CASING Size: 13 3/8 IN CASING Size: 8 5/8 IN

Depth Base: 412 Cement Amount: 1047 Cement Amount: 450 sx

Top of Cement: Circ to Pit

Depth Base:

600 sx

CASING Size: 5 1/2 IN

Depth Base: 5517

Cement Amount:

1180 sx

Top of Cement: Circ

TUBING Size: 27/8 IN

Depth Base: 4861

Cement Amount:

Top of Cement: SX

Test\_Report:

Type: INITIAL POTENTIAL

#: 1 Formation Top: PADDOCK

Depth Top: 4390 Depth Base:

Test\_Perf\_Report: Type: INITIAL POTENTIAL

#: 1 Formation Top

Depth Top: 4390 Depth Base:



## Water Analysis Report

C	n	m	n	a	n١	<i>i</i> ·
v	•	111	v	a	111	

COG - c/o Mack Energy Corporation

NORTHWEST CENTRAL

Sample #:

6181

Area:

Artesia

Analysis ID #:

108

Lease: Location:

Battery

Sample Point:

Water Tank

Botter

Sampling Date:	7/14/06	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	7/18/06	Chloride:	106917.0	3015.74	Sodium:	62520.5	2719.49
Analyst: Mitch	nell Labs	Bicarbonate:	105.1	1.72	Magnesium:	976.0	80.29
TDS (mg/l or g/m3):	178637.2	Carbonate:		,	Calcium:	5467.0	272.8
Density (g/cm3, tonne/m3):	1.124	Sulfate:	2650.0	55.17	Strontium:		
Anion/Cation Ratio:	1.124	Phosphate:			Barium:		
Amonication Natio.	'	Borate:			Iron:	1.2	0.04
		Silicate:			Potassium:	1	-
<u> </u>					Aluminum:		
Carbon Dioxide: 50		Hydrogen Sulfide:	•	42	Chromium:		
Oxygen:		pH at time of sampling		7	Copper:		
Comments:		· · ·	-	. '	Lead:		•
		pH at time of analysis:	:	.	Manganese:	0.4	0.01
		pH used in Calculation	on:	7	Nickel:		
,	Ī				Conductivity (mid	•	332500
	,			I	Resistivity (ohm	meter):	.0301

Cond	itions		Values C	alculated	at the Give	n Conditi	ons - Amou	ints of Sc	ale in lb/10	00 bbl		
Temp	Gauge Press.		alcite aCO3		sum 4*2H20	l .	ydrite aSO4		estite SO4		rite SO4	
°F	psi	Index	Amount	Index	, Amount	Index	Amount	Index	Amount	Index	Amount	
80	0	0.48	4.13	0.09	255.00	0.11	232.89	0.00	0.00	0.00	0.00	
100	0	0.51	4.72	0.02	64.56	0.10	221.10	0.00	0.00	0.00	0.00	
120	. 0	0.54	5.60	-0.04	0.00	0.12	257.66	0.00	0.00	0.00	0.00	
140	0	0.56	6.78	-0.09	0.00	0.17	331.36	0.00	0.00	0.00	0.00	





## > CONCHO

roject: SENM AOI: KP\_Longhorn Eddy Co.. NM JENKINS 'B' LEASE Production Map

Author	Scale.	Date:
K. Perez for R. Cox	Fit to Page	22 January, 2007

