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# Surface Use & Operating Plan

## Puckett 13 #4

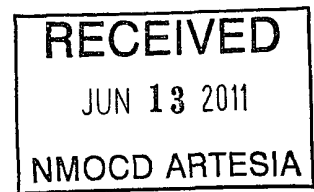
- Surface Tenant: Olane Caswell, 1702 Gillham, Brownfield, TX 79316
- New Road: approx. 225'
- Flow Line: approx. 910 feet
- Facilities: Puckett 12 East Tank Battery (existing)

### Well Site Information

V Door: Southwest

Topsoil: Northeast

Interim Reclamation: Northeast/Southeast



### Notes

-Proposed Access Road (Section A) may apply

**Onsite:** 1/25/2011

Tanner Nygren (BLM), Chris Moon (COG), Curtis Griffin (COG), Gary Box (J.W.S)

## **SURFACE USE AND OPERATING PLAN**

### **1. Existing & Proposed Access Roads**

- A. The well site survey and elevation plat for the proposed well is shown in Exhibit #1. It was staked by John West Engineering, Hobbs, NM.
- B. All roads to the location are shown in the topographic map Exhibit #2. The existing lease roads are illustrated and are adequate for travel during drilling and production operations. Upgrading existing roads prior to drilling the well will be done where necessary.
- C. Directions to location: From the intersection US Highway 82 and Co. Rd. 224 (Ripple Road), Go Northeast on US Highway 82 approx. 0.6 miles. Turn Left and go Northwest to Two Track Road approx. 0.1 mile. Turn Right and go Northeast approx. 0.15 miles. This location is approx. 345 feet Southeast of Two Track Road. See Vicinity Map, Exhibit #3
- D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease. Roads will be maintained according to specifications in section 2A of this Surface Use and Operating Plan.

### **2. Proposed Access Road:**

Exhibit #4 shows that 225' of new access road will be required for this location. If any road is required it will be constructed as follows:

- A. The maximum width of the running surface will be 14'. The road will be crowned, ditched and constructed of 6" rolled and compacted caliche. Ditches will be at 3:1 slope and 4 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns. If existing road conditions do not meet the above stated qualifications, upgrades will be constructed to meet these standards on all existing or non-existing lease roads.
- B. The average grade will be less than 1%.
- C. No turnouts are planned.
- D. No culverts, cattle guard, gates, low water crossings or fence cuts are necessary.

- E. Surfacing material will consist of native caliche. Caliche will be obtained from the actual well site if available. If not available onsite, caliche will be hauled from the nearest BLM caliche pit.

**3. Location of Existing Well:**

Exhibit #5 shows all existing wells within a one-mile radius of this well.

As shown on this plat there are numerous wells producing from the San Andres and Yeso formations.

**4. Location of Existing and/or Proposed Facilities:**

- A. COG Operating LLC does operate a production facility on this lease.
- B. If the well is productive, contemplated facilities will be as follows:
  - 1) Production will be sent to the Puckett 12 East Tank battery located in Section 12 at the Puckett 12 #60 well location. The facility location is shown in Exhibit #5.
  - 2) The tank battery and facilities including all flow lines and piping will be installed according to API specifications.
  - 3) Any additional caliche will be obtained from the actual well site. If caliche does not exist or is not plentiful from the well site, the caliche will be hauled from a BLM approved caliche pit. Any additional construction materials will be purchased from contractors.
  - 4) Proposed flow lines, will follow an archaeologically approved route to the Puckett 12 East Tank battery located in Section 12 at the Puckett 12 #60 well location. The flowline will be SDR 7 3" poly line laid on the surface and will be approximately 910 feet in length.
  - 5) It will be necessary to run electric power if this well is productive. Power will be provided by CVE and they will submit a separate plan and ROW for service to the well location.
  - 6) If the well is productive, rehabilitation plans will include the following:
    - a) The original topsoil from the well site will be returned to the location, and the site will be re-contoured as close as possible to the original site.

**5. Location and Type of Water Supply:**

The well will be drilled with combination brine and fresh water mud system as outlined in the drilling program. The water will be obtained from commercial water stations in the area and hauled to location by transport truck over the existing and proposed access roads shown in Exhibit #2. If a commercial fresh water source is nearby, fast line may be laid along existing road ROW's and fresh water pumped to the well. No water well will be drilled on the location.

**6. Source of Construction Materials and Location "Turn-Over" Procedure:**

Obtaining caliche: The primary way of obtaining caliche to build locations and roads will be by "turning over" the location. This means, caliche will be obtained from the actual well sight. A caliche permit will be obtained from BLM prior to pushing up any caliche. 2400 cu. Yards is max amount of caliche needed for pad and roads. Amount will vary for each pad. The procedure below has been approved by BLM personnel:

- A. The top 6 inches of topsoil is pushed off and stockpiled along the side of the location.**
- B. An approximate 120' X 120' area is used within the proposed well site to remove caliche.**
- C. Subsoil is removed and piled alongside the 120' by 120' area within the pad site.**
- D. When caliche is found, material will be stock piled within the pad site to build the location and road.**
- E. Then subsoil is pushed back in the hole and caliche is spread accordingly across entire location and road.**
- F. Once well is drilled, the stock piled top soil will be used for interim reclamation and spread along areas where caliche is picked up and the location size is reduced. Neither caliche or subsoil will be stock piled outside of the well pad. Topsoil will be stockpiled along the edge of the pad as depicted in attached plat.**

In the event that no caliche is found onsite, caliche will be hauled in from a BLM approved caliche pit.

**7. Methods of Handling Water Disposal:**

- A. The well will be drilled utilizing a closed loop mud system. Drill cuttings will be held in roll-off style mud boxes and taken to an NMOCD approved disposal site.
- B. Drilling fluids will be contained in steel mud pits.
- C. Water produced from the well during completion will be held temporarily in steel tanks and then taken to an NMOCD approved commercial disposal facility.
- D. Garbage and trash produced during drilling or completion operations will be collected in a trash bin and hauled to an approved landfill. No toxic waste or hazardous chemicals will be produced by this operation.
- E. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days. In the event of a dry hole only a dry hole marker will remain.

**8. Ancillary Facilities:**

No airstrip, campsite or other facilities will be built as a result of the operation on this well.

**9. Well Site Layout:**

- A. The drill pad layout, with elevations staked by John West Engineering, is shown in Exhibit #4. Dimensions of the pad and pits are shown on Exhibit #6. V door direction is Southwest. Topsoil, if available, will be stockpiled per BLM specifications. Because the pad is almost level no major cuts will be required.
- B. Exhibit #6 also shows the proposed orientation of closed loop system and access road. No permanent living facilities are planned, but a temporary foreman/toolpusher's trailer will be on location during the drilling operations.

**10. Plans for Restoration of the Surface:**

- A. Interim Reclamation will take place after the well has been completed. The pad will be downsized by reclaiming the areas not needed for production operations. The portions of the pad that are not needed for production operations will be re-contoured to its original state as much as possible. The caliche that is removed will be reused to either build another pad site or for road repairs within the lease. The stockpiled topsoil will

then be spread out reclaimed area and reseeded with a BLM approved seed mixture. In the event that the well must be worked over or maintained, it may be necessary to drive, park, and/or operate machinery on reclaimed land. This area will be repaired or reclaimed after work is complete.

- B. Final Reclamation: Upon plugging and abandoning the well, All caliche for well pad and lease road will be removed and surface will be recountoured to reflect its surroundings as much as possible. Caliche will be recycled for road repair or reused for another well pad within the lease. If any topsoil remains, it will be spread out and the area will be re-seeded with a BLM approved mixture and re-vegetated as per BLM orders.

**11. Surface Ownership:**

- A. The surface is owned by the U.S. Government and is administered by the Bureau of Land Management. The surface is multiple uses with the primary uses of the region for grazing of livestock and the production of oil and gas.
- B. The surface tenant for this site is Olane Caswell, 1702 Gillham, Brownfield, TX 79316.
- C. The proposed road routes and surface location will be restored as directed by the BLM

**12. Other Information:**

- A. The area around the well site is grassland and the topsoil is sandy. The vegetation is moderately sparse with native prairie grasses, some mesquite and shinnery oak. No wildlife was observed but it is likely that mule deer, rabbits, coyotes and rodents traverse the area.
- B. There is no permanent or live water in the immediate area.
- C. There are no dwellings within 2 miles of this location.
- D. If needed, a Cultural Resources Examination is being prepared by Southern New Mexico Archaeological Services, Inc. P.O. Box 1, Bent New Mexico, 88314, phone # 505-671-4797 and the results will be forwarded to your office in the near future. Otherwise, **COG will be participating in the Permian Basin MOA Program.**

**13. Bond Coverage:**

Bond Coverage is Nationwide Bond # 000215

**14. Lessee's and Operator's Representative:**

The COG Operating LLC representative responsible for assuring compliance with the surface use plan is as follows:

John Coffman,

Drilling Superintendent

COG Operating LLC

550 W. Texas, Suite 1300

Midland, TX 79701

Phone (432) 683-7443 (office)

(432) 631-9762 (cell)

Erick Nelson.

Division Operations Manager

COG Operating LLC

550 W. Texas, Suite 1300

Midland, TX 79701

Phone (505) 746-2210 (office)

(432) 238-7591 (cell)

*Surface Use Plan  
COG Operating, LLC  
Puckett 13 #4  
330' FNL & 990' FEL  
Section 13, T-17-S, R-31-E, UL A  
Eddy County, New Mexico*

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I hereby certify that I, or persons under my direct supervision, have inspected the drill site and access road proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or COG Operating, LLC, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements. Executed this 25th day of February, 2011.

Signed: Carl Bird

Printed Name: Carl Bird

Position: Drilling Engineer

Address: 550 W. Texas, Suite 1300, Midland, Texas 79701

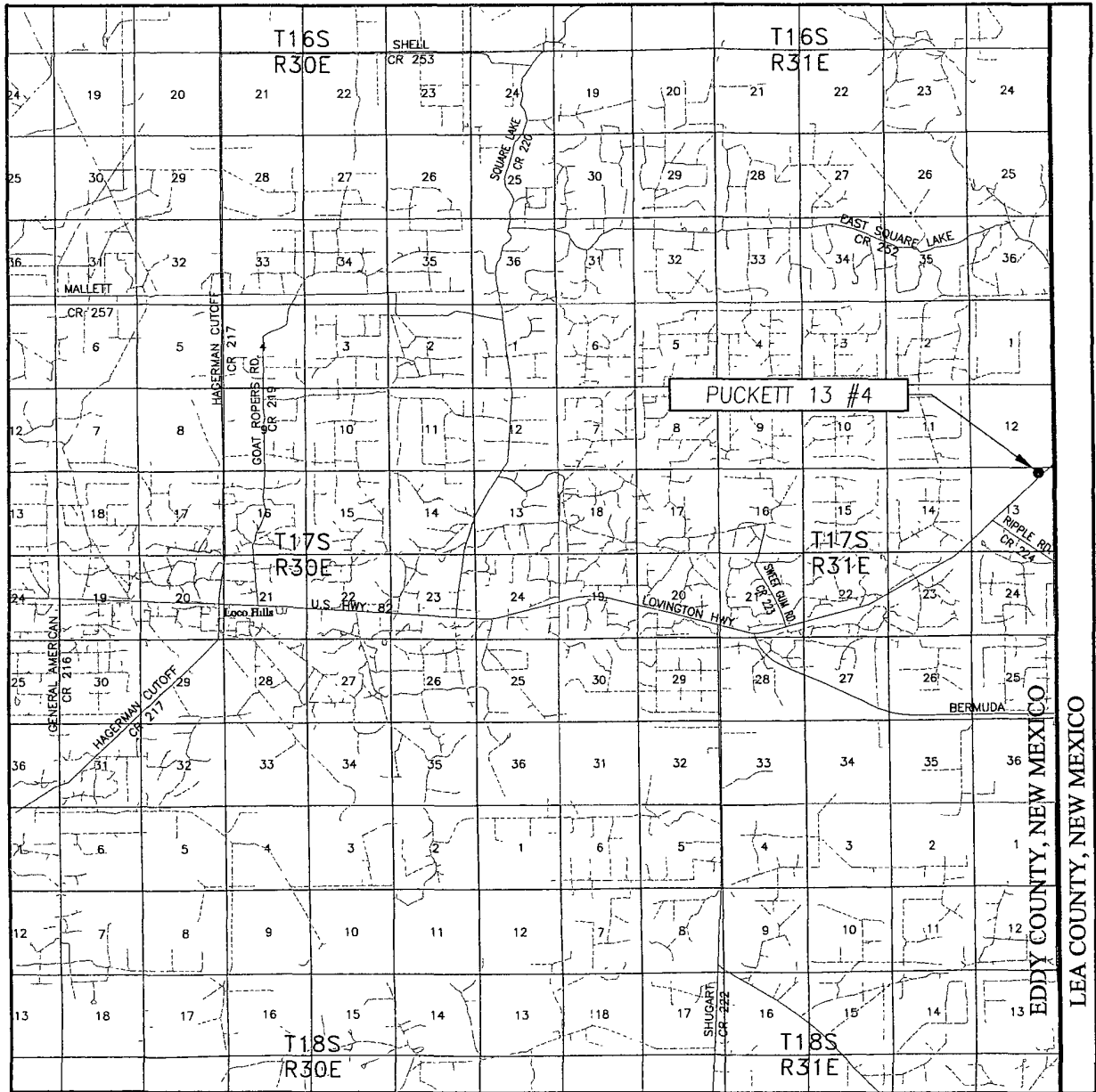
Telephone: (432) 683-7443

Field Representative (if not above signatory): Same

E-mail: [cbird@conchoresources.com](mailto:cbird@conchoresources.com)




# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 13 TWP. 17-S RGE. 31-E  
 SURVEY \_\_\_\_\_ N.M.P.M. \_\_\_\_\_  
 COUNTY EDDY STATE NEW MEXICO  
 DESCRIPTION 330' FNL & 990' FEL  
 ELEVATION \_\_\_\_\_ 3961' \_\_\_\_\_  
 OPERATOR COG OPERATING, LLC  
 LEASE PUCKETT 13

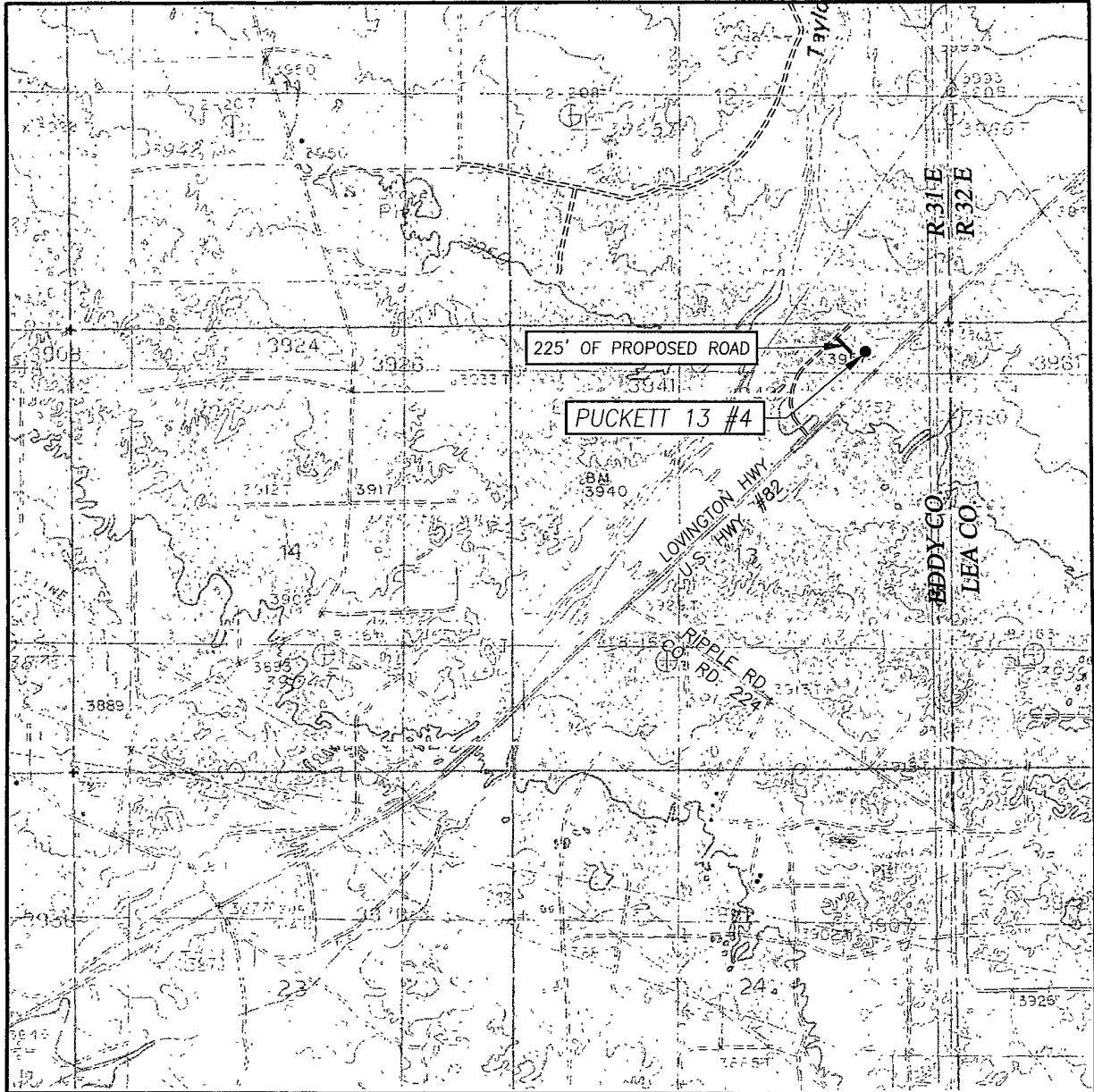


PROVIDING SURVEYING SERVICES  
SINCE 1946

**JOHN WEST SURVEYING COMPANY**

412 N. DAL PASO  
HOBBS, N.M. 88240  
(575) 393-3117

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
MALJAMAR, N.M. - 10'

SEC. 13 TWP. 17-S RGE. 31-E

SURVEY \_\_\_\_\_ N.M.P.M.

COUNTY EDDY STATE NEW MEXICO


DESCRIPTION 330' FNL & 990' FEL

ELEVATION 3961'

OPERATOR COG OPERATING, LLC

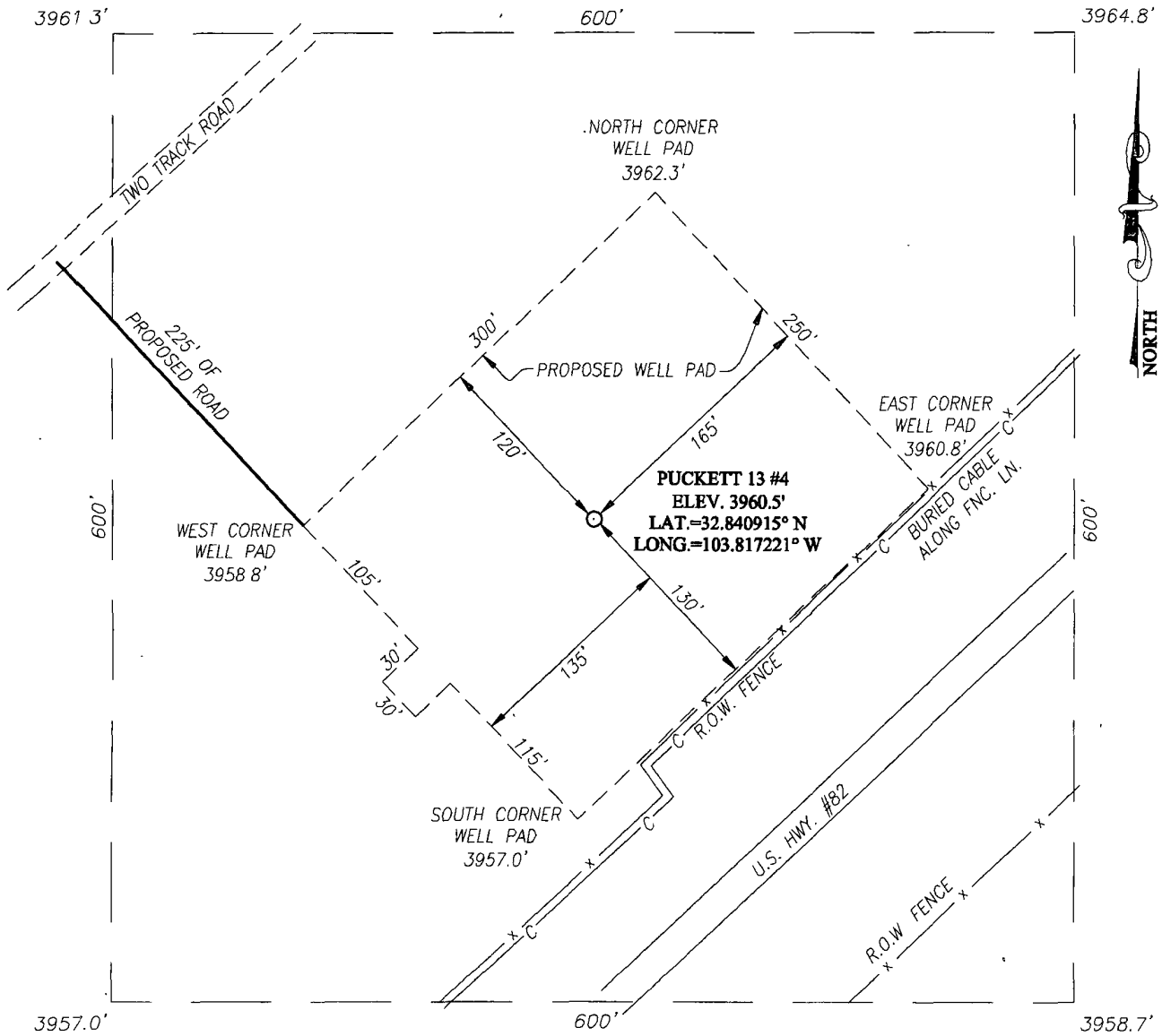
LEASE PUCKETT 13

U.S.G.S. TOPOGRAPHIC MAP  
MALJAMAR, N.M.



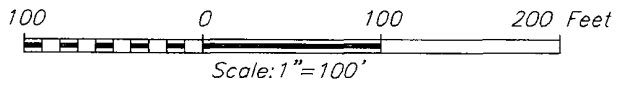
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**SECTION 13, TOWNSHIP 17 SOUTH, RANGE 31 EAST, N.M.P.M.**  
 EDDY COUNTY NEW MEXICO




**DIRECTIONS TO LOCATION**

FROM THE INTERSECTION OF U.S. HWY. #82 AND CO. RD. #224 (RIPPLE ROAD), GO NORTHEAST ON U.S. HWY. #82 APPROX. 0.6 MILES. TURN LEFT AND GO NORTHWEST ON TWO TRACK ROAD APPROX. 0.1 MILE. TURN RIGHT AND GO NORTHEAST APPROX. 0.15 MILES THIS LOCATION IS APPROX 345 FEET SOUTHEAST OF TWO TRACK ROAD.



<b>COG OPERATING, LLC</b>			
PUCKETT 13 #4 WELL LOCATED 330 FEET FROM THE NORTH LINE AND 990 FEET FROM THE EAST LINE OF SECTION 13, TOWNSHIP 17 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO			
Survey Date: 1/28/11		Sheet 1 of 1 Sheets	
W.O. Number. 11.11.0188		Dr By. LA	Rev 1:4/15/11
Date: 2/2/11	11110188		Scale: 1"=100'



PROVIDING SURVEYING SERVICES  
SINCE 1946

**JOHN WEST SURVEYING COMPANY**

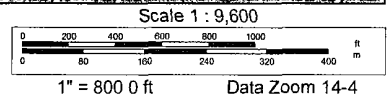
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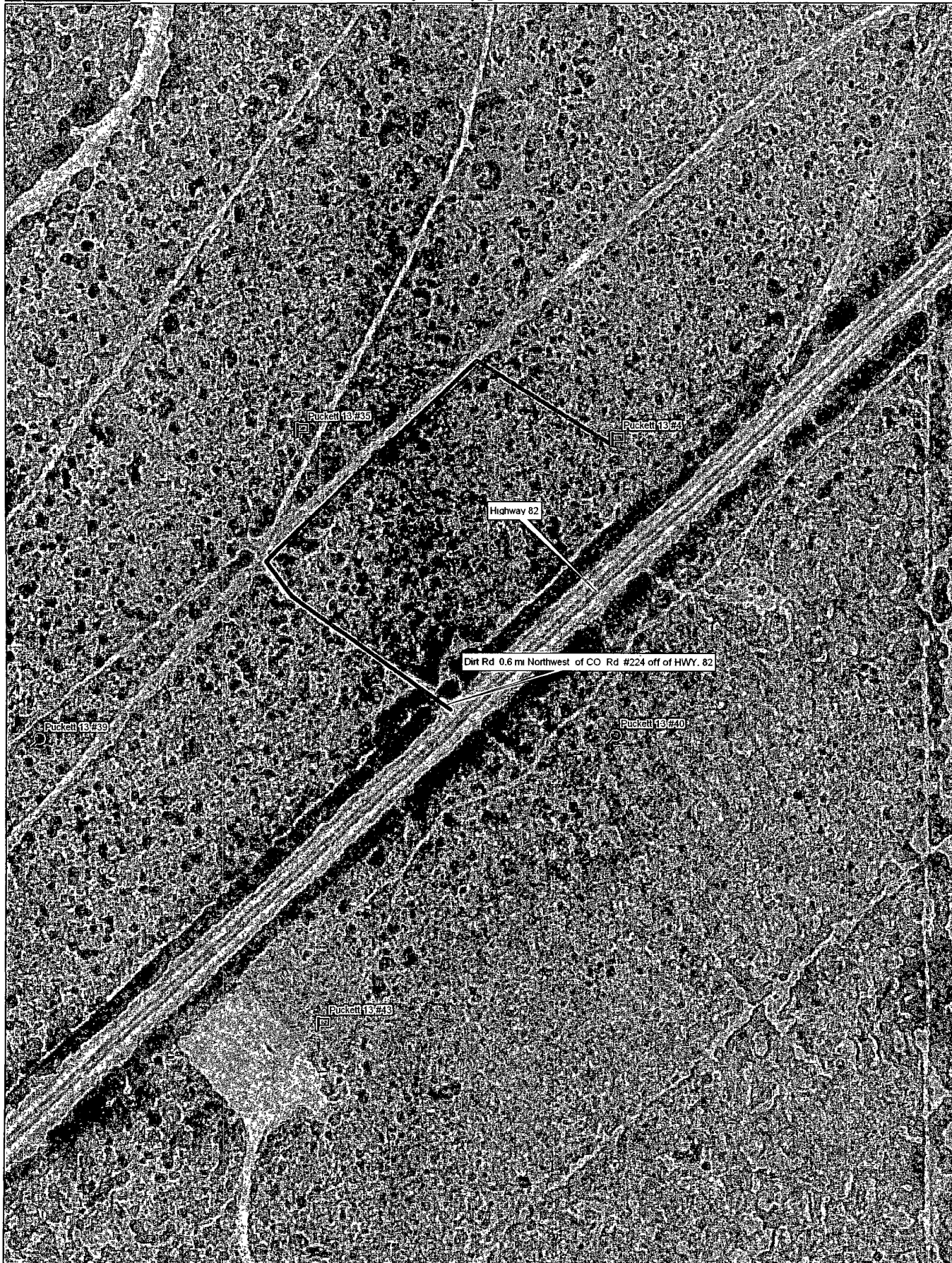


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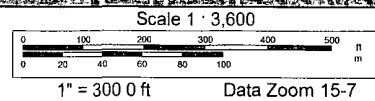




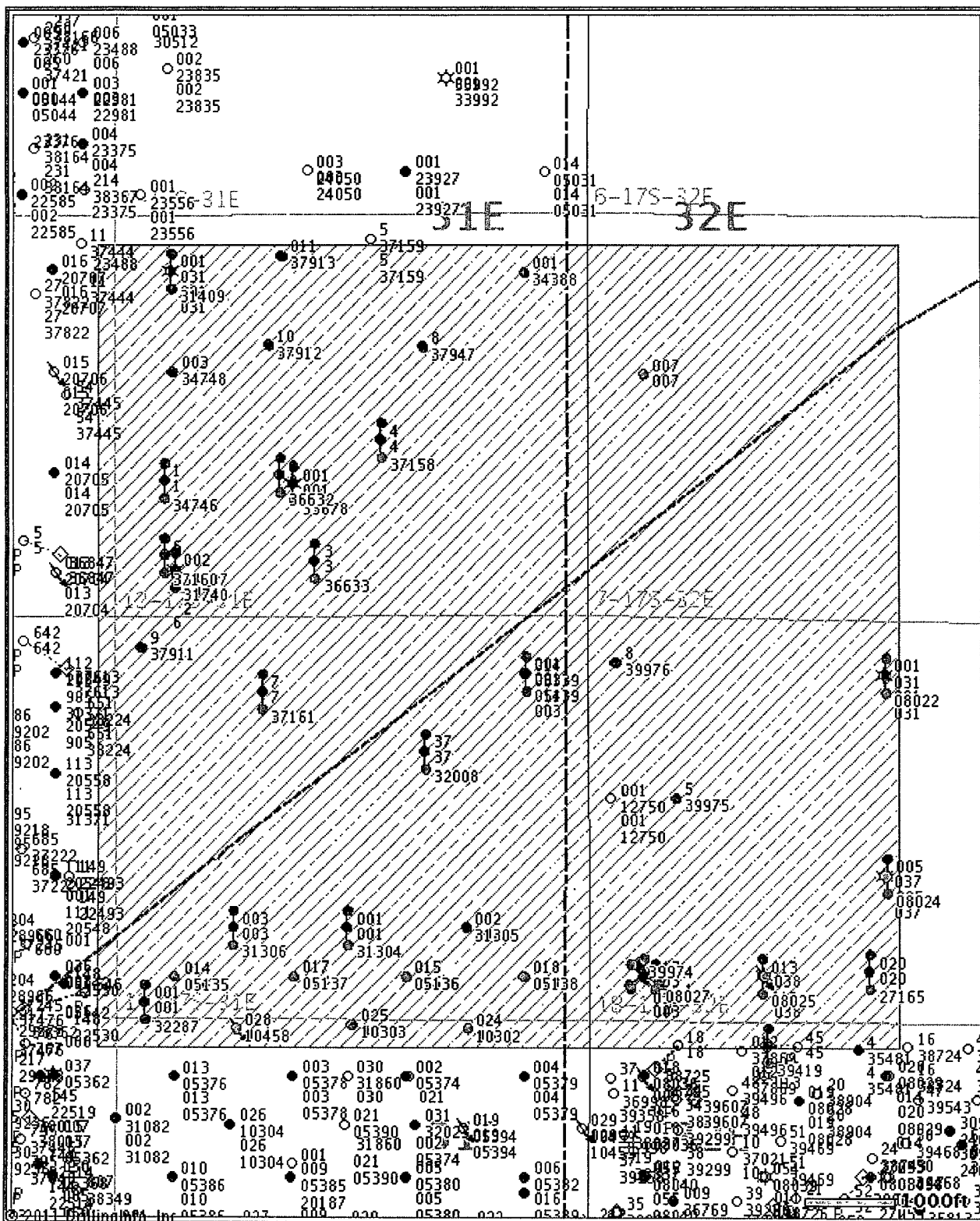
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### Offset wells to Puckett 13 #4



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## Offset wells to Puckett 13 #4

API#	Operator	County	Legal	Lease	Well#	Date Issued	Permitted Depth	Permit TVD	Images	Doc	Total Depth	Well Type	Well Status	Permit#
30-025-39974	CIMAREX ENERGY CO. OF COLORADO	LEA	S:18, T:17S, R:32E	HT FEDERAL	1	12/1/2010	7,028		Yes	link	7,028	PO	Active Permit	TEMP669325595
30-025-39975	CIMAREX ENERGY CO. OF COLORADO	LEA	S:18, T:17S, R:32E	HT FEDERAL	5	12/1/2010	7,000		Yes	link	7,000	PO	Active Permit	TEMP1098496554
30-015-37947	HUDSON OIL COMPANY OF TEXAS	EDDY	S:12, T:17S, R:31E	PUCKETT NORTH	8	6/15/2010	3,993		Yes	link	3,993	PO	Active	TEMP565438442
30-015-37911	HUDSON OIL COMPANY OF TEXAS	EDDY	S:13, T:17S, R:31E	PUCKETT NORTH	9	6/7/2010	4,300		Yes	link	4,300	PO	Active Permit	TEMP774753213
30-015-37912	HUDSON OIL COMPANY OF TEXAS	EDDY	S:12, T:17S, R:31E	PUCKETT NORTH	10	6/7/2010	4,300		Yes	link	4,300	PO	Active Permit	TEMP1538616053
30-015-37913	HUDSON OIL COMPANY OF TEXAS	EDDY	S:12, T:17S, R:31E	PUCKETT NORTH	011	6/7/2010	4,300		Yes	link	4,300	PO	Active Permit	TEMP528958318
30-025-39976	CIMAREX ENERGY CO OF COLORADO	LEA	S:18, T:17S, R:32E	HT FEDERAL	8	1/1/2010	7,000		Yes	link	7,000	PO	Active Permit	TEMP1615430510
30-015-37161	HUDSON OIL COMPANY OF TEXAS	EDDY	S:13, T:17S, R:31E	PUCKETT NORTH	7	7/10/2009	4,300		Yes	link	4,296	O	Active Permit	TEMP273544166
30-015-37160	HUDSON OIL COMPANY OF TEXAS	EDDY	S:12, T:17S, R:31E	PUCKETT NORTH	6	7/10/2009	4,300		Yes	link	4,290	O	Active Permit	TEMP1280882995
30-015-37158	HUDSON OIL COMPANY OF TEXAS	EDDY	S:12, T:17S, R:31E	PUCKETT NORTH	4	7/10/2009	4,300		Yes	link	4,299	O	Active Permit	TEMP782652065
30-025-39419	COG OPERATING LLC	LEA	S:19, T:17S, R:32E	BC FEDERAL	45	5/19/2009	7,013	7,000	Yes	link	7,034	O	Active Permit	TEMP1061129939
30-015-36632	HUDSON OIL COMPANY OF TEXAS	EDDY	S:12, T:17S, R:31E	PUCKETT NORTH	2	9/17/2008	4,300		Yes	link	4,258	O	Active Permit	TEMP595292116
30-015-36633	HUDSON OIL COMPANY OF TEXAS	EDDY	S:12, T:17S, R:31E	PUCKETT NORTH	3	9/17/2008	4,300		Yes	link	4,250	O	Active Permit	TEMP1755063219
30-015-34746	HUDSON OIL COMPANY OF TEXAS	EDDY	S:12, T:17S, R:31E	PUCKETT NORTH	1	3/28/2006	4,300		No	link	4,268	O	Active Permit	TEMP1994812118
30-015-34747	HUDSON OIL COMPANY OF TEXAS	EDDY	S:12, T:17S, R:31E	PUCKETT NORTH	2	3/28/2006	4,300		No	link	4,300	PO	Active Permit	TEMP1927347174
30-015-34748	HUDSON OIL COMPANY OF TEXAS	EDDY	S:12, T:17S, R:31E	PUCKETT NORTH	3	3/28/2006	4,300		No	link	4,300	PO	Active Permit	TEMP740334778
30-015-34388	HUDSON OIL COMPANY OF TEXAS	EDDY	S:12, T:17S, R:31E	FRANCOTTE FEDERAL	001	10/13/2005	12,700		No	link	12,700	PG	Active Permit	TEMP750787770
30-015-33678	MARBOB ENERGY CORP	EDDY	S:12, T:17S, R:31E	KNOCKABOUT FEDERAL	001	9/30/2004			No	link	12,610	G	Active	TEMP1803509799
	HUDSON OIL COMPANY OF			WESCOTT										

30-015-32287	TEXAS	EDDY	S 13, T:17S, R 31E	FEDERAL	001	6/16/2003	6,200		No	link	6,200	O	Active	TEMP412112998
30-015-32287	HUDSON OIL COMPANY OF TEXAS	EDDY	S:13, T 17S, R:31E	WESCOTT FEDERAL	001	5/31/2003			No	link	6,200	O	Active	TEMP315762864
30-025-08027	CONOCOPHILLIPS COMPANY	LEA	S.18, T:17S, R:32E	MCA UNIT	017	1/1/2003			No	link		O	Plugged and Abandoned	TEMP2039413596
30-025-08025	CONOCOPHILLIPS COMPANY	LEA	S:18, T:17S, R:32E	MITCHELL B	013	1/1/2003			No	link		I	Temporarily Abandoned	TEMP1717487559
30-025-27165	CONOCOPHILLIPS COMPANY	LEA	S:18, T:17S, R:32E	MITCHELL B	020	1/1/2003	0		No	link	4,200	O	Pumping	TEMP1854842916
30-015-31409	HUDSON OIL COMPANY OF TEXAS	EDDY	S.12, T:17S, R 31E	PUCKETT B 12	001	8/8/2002	12,500		No	link	12,500	G	Active	TEMP1427228319
30-015-31740	HUDSON OIL COMPANY OF TEXAS	EDDY	S:12, T 17S, R:31E	PUCKETT B 12	002	8/8/2002			No	link	12,500	G	Active	TEMP605942659
30-015-31409	HUDSON OIL COMPANY OF TEXAS	EDDY	S:12, T:17S, R:31E	PUCKETT B 12	001	7/31/2002			No	link	12,500	G	Active	TEMP248537726
30-015-31740	HUDSON OIL COMPANY OF TEXAS	EDDY	S 12, T 17S, R 31E	PUCKETT B 12	002	7/31/2002			No	link	12,500	G	Active	TEMP1835725331
30-015-32008	HUDSON OIL COMPANY OF TEXAS	EDDY	S:13, T:17S, R:31E	PUCKETT B	037	3/8/2002			No	link	12,600	O	Pumping	TEMP91196321
30-015-31304	HUDSON OIL COMPANY OF TEXAS	EDDY	S 13, T:17S, R 31E	PUCKETT A LL	001	8/18/2000			No	link	4,045	O	Pumping	TEMP1345008382
30-015-31305	HUDSON OIL COMPANY OF TEXAS	EDDY	S.13, T:17S, R 31E	PUCKETT A LL	002	8/18/2000			No	link	4,070	O	Active	TEMP1500062189
30-015-31306	HUDSON OIL COMPANY OF TEXAS	EDDY	S 13, T:17S, R:31E	PUCKETT A LL	003	8/18/2000			No	link	4,023	O	Pumping	TEMP1134165985
30-025-08024	CONOCO, INC.	LEA	S:18, T:17S, R:32E	MITCHELL B	005	10/25/1989			No	link	4,200	O	Active	TEMP1226101238