Surface Use & Operating Plan

Puckett 13 #12

• Surface Tenant: Olane Caswell, 1702 Gillham, Brownfield, TX 79316

New Road: approx. 323'

Flow Line: approx. 0.95 mi

Facilities: Puckett 13 Tank Battery (existing)

RECEIVED

JUN 15 2011

NMOCD ARTESIA

Well Site Information

V Door: Southwest Topsoil: Northeast

Interim Reclamation: Northeast/Northwest

Notes

- Proposed access road (Section A) will apply

Onsite: 2/23/2011

Tanner Nygren (BLM), Rex M. (BLM Biologist), Chris Moon (COG), Caden Jameson (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 southeast on Co. Rd. #224 0.4 miles. Turn left and go northeast approx. 0.2 miles. Turn left and go northwest approx. 0.5 miles to the Puckett B #37 well pad. This location stake is approx. 783 feet east of the existing well pad. 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 323' 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, cattleguard, 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 13 Tank battery located in Section 13 at the Puckett 13 #58 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 13 Tank battery located in Section 13 at the Puckett 13 #58 well location. The flowline will be SDR 7 3" poly line laid on the surface and will be approximately 0.95 miles 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, Erick Nelson.

Drilling Superintendent Division Operations Manager

COG Operating LLC COG Operating LLC

550 W. Texas, Suite 1300 550 W. Texas, Suite 1300

Midland, TX 79701 Midland, TX 79701

Phone (432) 683-7443 (office) Phone (505) 746-2210 (office)

(432) 631-9762 (cell) (432) 238-7591 (cell)

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 make 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:

Printed Name: Carl Bird

Position: Drilling Engineer

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

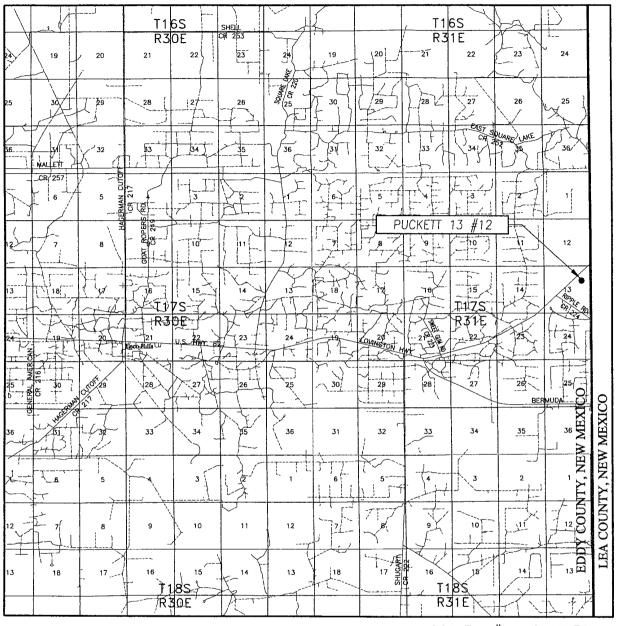
Telephone: (432) 683-7443

Field Representative (if not above signatory): Same

and bid

E-mail: cbird@conchoresources.com

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. <u>13</u> T	WP. <u>17</u>	<u>-S</u> R(3E. <u>3</u>	1 – E	<u> </u>
SURVEY	N	.M.P.N	1.		
COUNTY_ED	DY S	STATE_	NEW	ME	XICO
DESCRIPTION	1650'	FNL	& 9	90,	FEL
ELEVATION	·	394	·5'		
OPERATOR	COG	OPERA	TING,	LL	<u>C</u>
LEASE	PHO	CKETT	13		

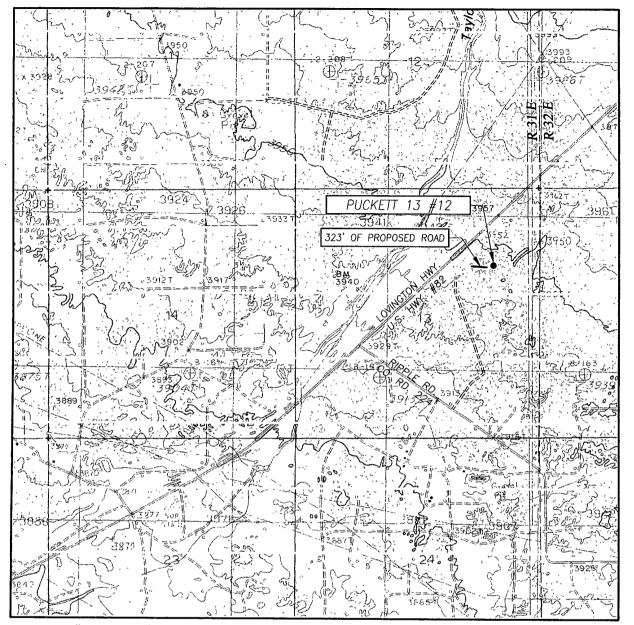


PROVIDING SURVEYING SERVICES SINCE 1946

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 1650' FNL & 990' FEL

ELEVATION 3945'

OPERATOR COG OPERATING, LLC

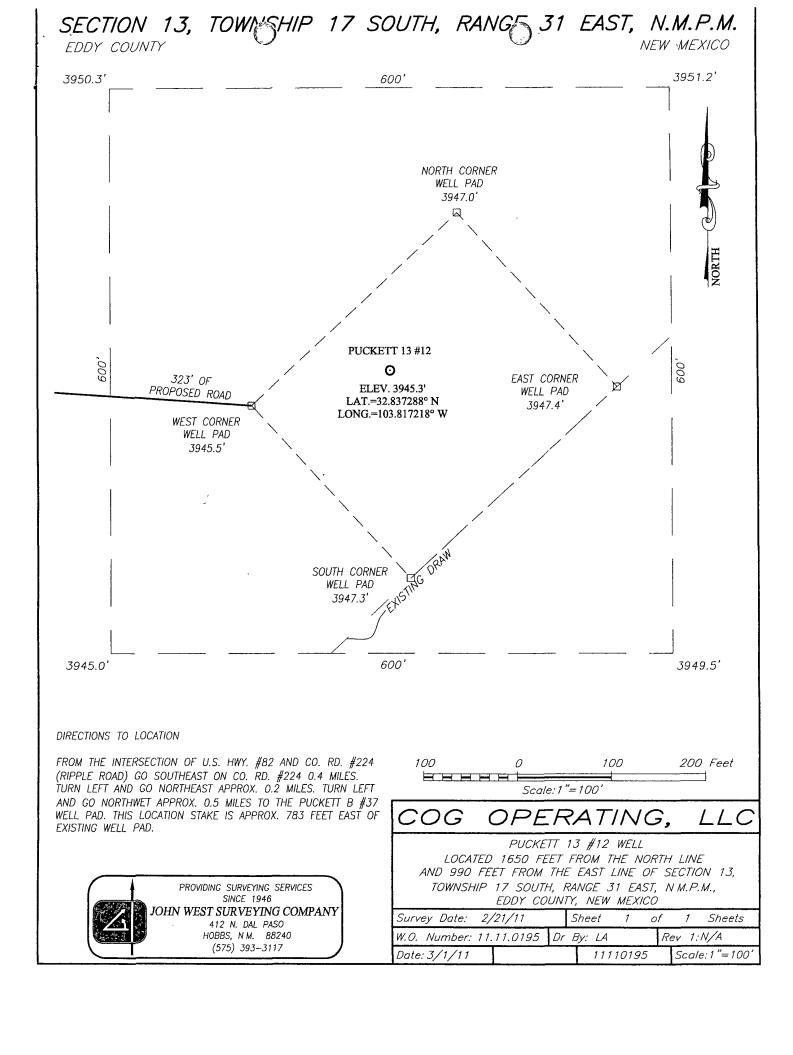
LEASE PUCKETT 13

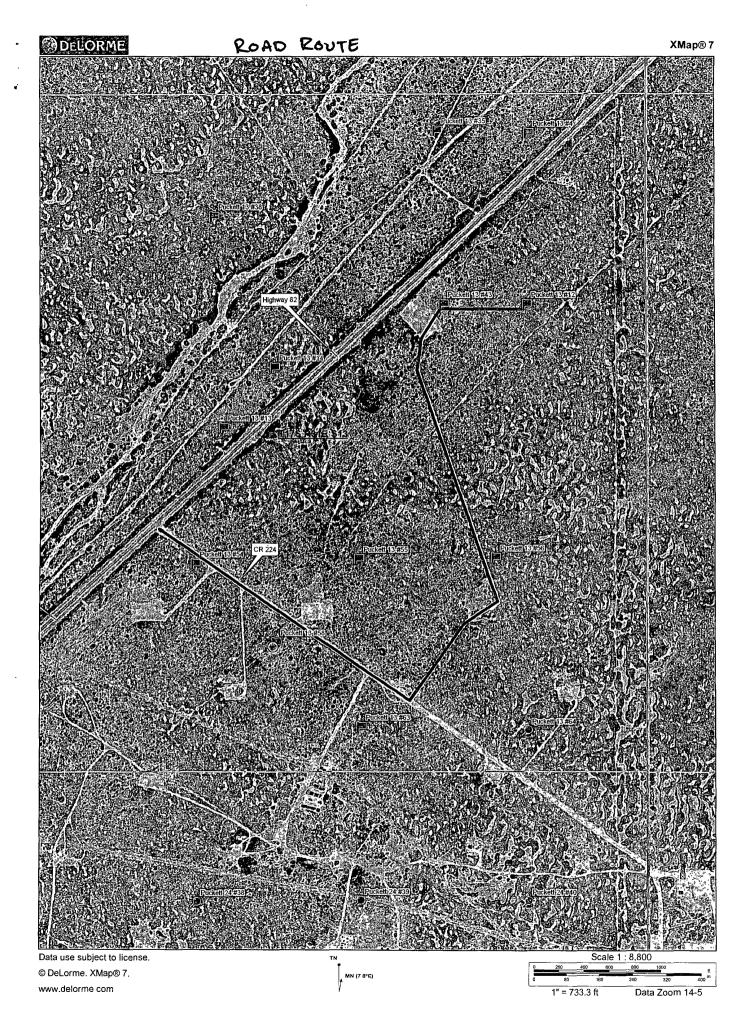
U.S.G.S. TOPOGRAPHIC MAP

MALJAMAR, N.M.



PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117





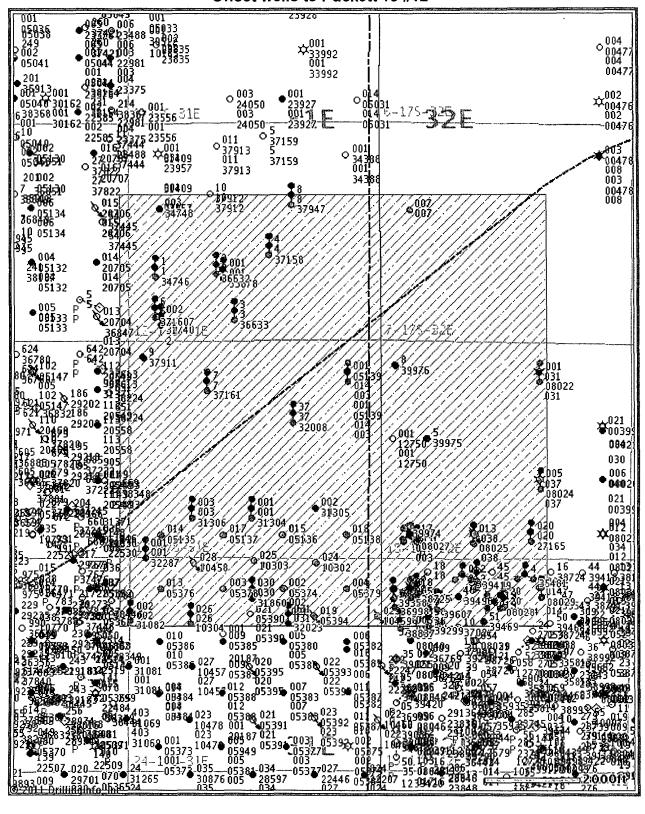
Offset wells to Puckett 13 #12

API#	Operator	County	Legal	Lease	Well#	Date Issued	Permitted Depth	Permit TVD	Images	Doc	Total Depth	Well Type	Well Status	Permit#
· ·	CIMAREX ENERGY													
30-025-39974	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
00 020 00074	CIMAREX ENERGY	LLA	3.10, 1.173, N.32L	TITTEDETOLE	 	12/1/2010	7,026		165	mik	7,020		Active Fernia	1 LIVIF 009323393
	CO. OF								ĺ					
30-025-39975	COLORADO HUDSON OIL	LEA	S:18, T-17S, R-32E	HT FEDERAL	5	12/1/2010	7,000		Yes	link	7,000	PO	Active Permit	TEMP1098496554
	COMPANY OF			PUCKETT						İ				
30-015-37947	TEXAS	EDDY	S:12, T:17S, R:31E	NORTH	8	6/15/2010	3,993	<u></u>	Yes	link	3,993	PO	Active	TEMP565438442
	HUDSON OIL					•								
30-015-37911	COMPANY OF	FDDY	S·13, T:17S, R:31E	PUCKETT NORTH	9	6/7/2010	4,300		Yes	link	4,300	PO	Active Permit	TEMP774753213
00 010 07011	CIMAREX ENERGY	LDD.	0 10, 1.170, N.O.L	NOKIII	-	0/1/2010	4,300	<u> </u>		IIIIK	4,300	' '	Active I chilic	7EWI 774703213
	CO. OF							ĺ]					
30-025-39976	COLORADO	LEA	S:18, T·17S, R:32E	HT FEDERAL	8	1/1/2010	7,000	·	Yes	link	7,000	PO	Active Permit	TEMP1615430510
30-025-39607	COG OPERATING	LEA	S:19, T:17S, R:32E	BC FEDERAL	34	11/25/2009	6,800]	Yes	link	6,945	ا ا	Active Permit	TEMP232522771
	COG OPERATING					,	3,200	l		1	5,5 ,5			
30-025-39496	LLC	LEA	S 19, T:17S, R 32E	BC FEDERAL	48	8/12/2009	6,900		Yes	link	6,900	PO	Active Permit	TEMP522928471
30-025-39469	COG OPERATING	LEA	S·19, T:17S, R:32E	BC FEDERAL	51	7/20/2009	6,900		Yes	link	6,900	PO	Active Permit	TEMP423382244
30 020 00 103	HUDSON OIL	LLX	3 13, 1.173, N.32L	BOTEDEIVAL		112012003	0,500		163	IIIIK	0,300		Active i cirrii	1EWI 420302244
	COMPANY OF	İ		PUCKETT										
30-015-37161	TEXAS	EDDY	S 13, T·17S, R.31E	NORTH	7	7/10/2009	4,300		Yes	lınk	4,296	0	Active Permit	TEMP273544166
	HUDSON OIL COMPANY OF		,	PUCKETT					ļ		!	ļ		
30-015-37160	TEXAS	EDDY	S.12, T:17S, R:31E	NORTH	6	7/10/2009	4,300		Yes	link	4,290	0	Active Permit	TEMP1280882995
	HUDSON OIL													
30-015-37158	COMPANY OF TEXAS	EDDY	S 12, T.17S, R [.] 31E	PUCKETT NORTH	4	7/10/2009	4.300	<u> </u>	Yes	link	4.299	ا ا	Active Permit	TEMP782652065
00 010 01 100	COG OPERATING		0 12, 1.110, 1012	11011111	 	7710/2000	1,000		- 100	<u>.</u>	1,200		7.00.10 7.00.10	
30-025-39419	LLC	LEA	S:19, T:17S, R:32E	BC FEDERAL	45	5/19/2009	7,013	7,000	Yes	lınk	7,034	0	Active Permit	TEMP1061129939
30-025-39358	COG OPERATING	LEA	0.40 T.470 F.00F	BC FEDERAL	37	1/30/2009	6.800		V	link	7.010	0	Active Permit	TEMP615591651
30-025-39356	COG OPERATING	LEA	S.19, T·17S, R·32E	BC FEDERAL	37	1/30/2009	0,800		Yes	IIIIK	7,010	- 0	Active Fermit	1EMF013391031
30-025-39299	LLC	LEA	S:19, T.17S, R:32E	BC FEDERAL	38	12/5/2008	6,800		Yes	lınk	6,818	0	Active Permit	TEMP1707957802
	HUDSON OIL													
30-015-36632	COMPANY OF TEXAS	EDDY	S:12, T.17S, R:31E	PUCKETT NORTH	2	9/17/2008	4,300		Yes	link	4,258	0	Active Permit	TEMP595292116
30 0 10 30032	HUDSON OIL		0.12, 1.170, 10.012	NORTH		3/11/2000	7,000		- 103		1,200		, total of the	121111 000202710
	COMPANY OF			PUCKETT								_		
30-015-36633	TEXAS	EDDY	S:12, T:17S, R:31E	NORTH	3	9/17/2008	4,300		Yes	link	4,250	0	Active Permit	TEMP1755063219
30-025-38837	COG OPERATING	LEA	S:19, T:17S, R:32E	BC FEDERAL	19	3/26/2008	7.200		Yes	link	7.200	PO	Active Permit	TEMP282327276
30 020 00001	COG OPERATING	EL-N	0.10, 1.170, 10022	BOTEBLIGAE	1 10	0/20/2000	1,200				7,200			
30-025-38904	LLC	LEA	S.19, T:17S, R:32E	BC FEDERAL	20	3/26/2008	7,200		Yes	lınk	7,020	0	Active Permit	TEMP121098942
00.005.00705	COG OPERATING	1.50	C.40 T.470 B 005	BO EEDEDAL	1	1/05/0000	7.000		Vaa	lint:	7 100	0	Active Permit	TEMP194870078
30-025-38725	COG OPERATING	LEA	S:19, T:17S, R 32E	BC FEDERAL	18	1/25/2008	7,200		Yes	link	7,180		Active Fermit	1EWF 1940/00/6
30-025-37869	LLC	LEA	S.19, T·17S, R:32E	BC FEDERAL	12	5/15/2006	6,700		No	link	6,780	0	Active Permit	TEMP611876723
	HUDSON OIL	,		511515										
30-015-34746	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
30-0 10-341 40	ILMO	LDU1	5 12, 1.175, ICOLE	HOKIII	 	3/20/2000	4,500		140	ALIK.	7,200	_		1

	HUDSON OIL COMPANY OF			PUCKETT									.
30-015-34747	TEXAS	EDDY	S:12, T.17S, R:31E	NORTH	2	3/28/2006	4,300	No	lınk	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
30-025-36998	MACK ENERGY CORPORATION or MACK ENERGY CORP	LEA	S:19, T:17S, R.32E	BC FEDERAL	011	12/8/2004	7,000	No	link	6,720	0	Active Permit	TEMP395711160
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
30-015-32023	HUDSON OIL COMPANY OF TEXAS	EDDY	S.24, T:17S, R:31E	PUCKETT A	031	6/16/2003	4,200	No	link	4,200	0	Active	TEMP218953726
30-015-32287	HUDSON OIL COMPANY OF .TEXAS	EDDY	S:13, T:17S, R:31E	WESCOTT FEDERAL	001	6/16/2003	6,200	No	link	6,200	0	Active	TEMP412112998
30-015-32023	HUDSON OIL COMPANY OF TEXAS	EDDY	S:24, T:17S, R.31E	PUCKETT A	031	5/31/2003		 No	link	4,200	0	Active	TEMP324459305
30-015-32287	HUDSON OIL COMPANY OF TEXAS	EDDY	S 13, T:17S, R 31E	WESCOTT FEDERAL	001	5/31/2003	ī	No	link	6,200	0	Active	TEMP315762864
30-025-08027	CONOCOPHILLIPS COMPANY	LEA	S:18, T:17S, R:32E	MCA UNIT	017	1/1/2003		No	lınk		0	Plugged and Abandoned	TEMP2039413596
30-025-08028	CONOCOPHILLIPS COMPANY	LEA	S:19, T:17S, R 32E	MCA UNIT	019	1/1/2003	0	No	link	0	0	Pumping	TEMP2019406653
30-025-08029	CONOCOPHILLIPS COMPANY	LEA	S 19, T:17S, R.32E	MCA UNIT	020	1/1/2003		No	link		PI	Temporarily Abandoned	TEMP2006236413
30-025-08025	CONOCOPHILLIPS COMPANY	LEA	S:18, T:17S, R.32E	MITCHELL B	013	1/1/2003		No	lınk		1	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	0	Pumping	TEMP1854842916
30-015-31860	HUDSON OIL COMPANY OF TEXAS	EDDY	S:24, T.17S, R 31E	PUCKETT A	030	9/3/2002	4,200	No	lınk	4,200	PO	Active Permit	TEMP638381170
30-015-3 <u>1860</u>	HUDSON OIL COMPANY OF TEXAS	EDDY	S:24, T:17S, R.31E	PUCKETT A	030	8/31/2002		No	link	4,200	PO	Active Permit	TEMP643617747
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
30-015-31740	HUDSON OIL COMPANY OF TEXAS	EDDY	S:12, T 17S, R:31E	PUCKETT B 12	002	7/31/2002		No	lınk	12,500	G	Active	TEMP1835725331
	HUDSON OIL COMPANY OF												
30-015-32008	TEXAS MACK ENERGY	EDDY	S.13, T 17S, R 31E	PUCKETT B	037	3/8/2002		 No	link	12,600	0	Pumping	TEMP91196321
30-025-35481	CORP	LEA	S:19, T:17S, R:32E	BC FEDERAL	004	2/23/2001		No	lınk	5,600	0	Pumping	TEMP947828571
30-015-1 <u>0304</u>	HUDSON OIL COMPANY OF TEXAS	EDDY	S.24, T 17S, R [.] 31E	PUCKETT A	026	2/2/2001	0	No	lınk	5,250	РО	Active	TEMP1032595564
30-015-31304	HUDSON OIL COMPANY OF TEXAS	EDDY	S:13, T:17S, R 31E	PUCKETT A LL	001	8/18/2000		No	lınk	4,045	0	Pumping	TEMP1345008382
	HUDSON OIL COMPANY OF												·

30-015-31305	TEXAS	EDDY	S:13, T.17S, R:31E	PUCKETT A LL	002	8/18/2000		No	lınk	4,070	0	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	0	Pumping	TEMP1134165985
30-015-31082	HUDSON OIL COMPANY OF TEXAS	EDDY	S.24, T 17S, R·31E	PUCKETT A W	002	4/12/2000		No	link	4,052	. 0	Pumping	TEMP1358798045
30-025-08036	CONOCO, INC.	LEA	S:19, T:17S, R.32E	MCA UNIT	018	1/18/1999		No	link	4,002	Ī	Injection Well	TEMP1039498021
30-025-08024	CONOCO, INC.	LFA	S:18, T:17S, R:32F	MITCHELLB	005	10/25/1989		No	link	4.200	0	Active	TEMP1226101238

Offset wells to Puckett 13 #12



© 2011 Drilling Info, Inc. All rights reserved. All data and information is provided "As Is" and subject to the <u>DI subscription agreement.</u>