

COG Operating LLC

30-015-38506

Hydrogen Sulfide Drilling Operation Plan**I. HYDROGEN SULFIDE TRAINING**

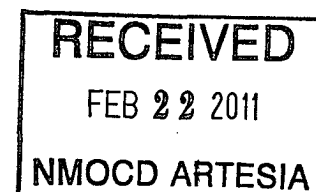
All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H₂S)
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H₂S detectors alarms warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H₂S on metal components. If high tensile tubular are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H₂S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan. **The concentrations of H₂S of wells in this area from surface to TD are low enough that a contingency plan is not required.**



II. H2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonable expected to contain H2S.

1. Well Control Equipment:

- A. Flare line.
- B. Choke manifold.
- C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
- D. Auxiliary equipment may include if applicable: annular preventer & rotating head.

2. Protective equipment for essential personnel:

- A. Mark II Survive air 30-minute units located in the doghouse and at briefing areas, as indicated on well site diagram.

3. H2S detection and monitoring equipment:

- A. 1 portable H2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 PPM are reached.

4. Visual warning systems:

- A. Wind direction indicators as shown on well site diagram (Exhibit #8).
- B. Caution/Danger signs (Exhibit #7) shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

5. Mud program:

- A. The mud program has been designed to minimize the volume of H2S circulated to surface. Proper mud weight, safe drilling practices, and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.

6. Metallurgy:

- A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.
- B. All elastomers used for packing and seals shall be H₂S trim.

7. Communication:

- A. Radio communications in company vehicles including cellular telephone and 2-way radio.
- B. Land line (telephone) communication at Office.

8. Well testing:

- A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safely and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill-stem-testing operations conducted in an H₂S environment will use the closed chamber method of testing.
- B. There will be no drill stem testing.

EXHIBIT #7

WARNING
YOU ARE ENTERING AN H₂S
AUTHORIZED PERSONNEL ONLY

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED
- 2. HARD HATS REQUIRED
- 3. SMOKING IN DESIGNATED AREAS ONLY
- 4. BE WIND CONSCIOUS AT ALL TIMES
- 5. CHECK WITH COG OPERATING FOREMAN AT

COG OPERATING LLC
1-432-683-7443
1-575-746-2010

EDDY COUNTY EMERGENCY NUMBERS

ARTESIA FIRE DEPT. 575-746-5050
ARTESIA POLICE DEPT. 575-746-5000
EDDY CO. SHERIFF DEPT. 575-746-9888

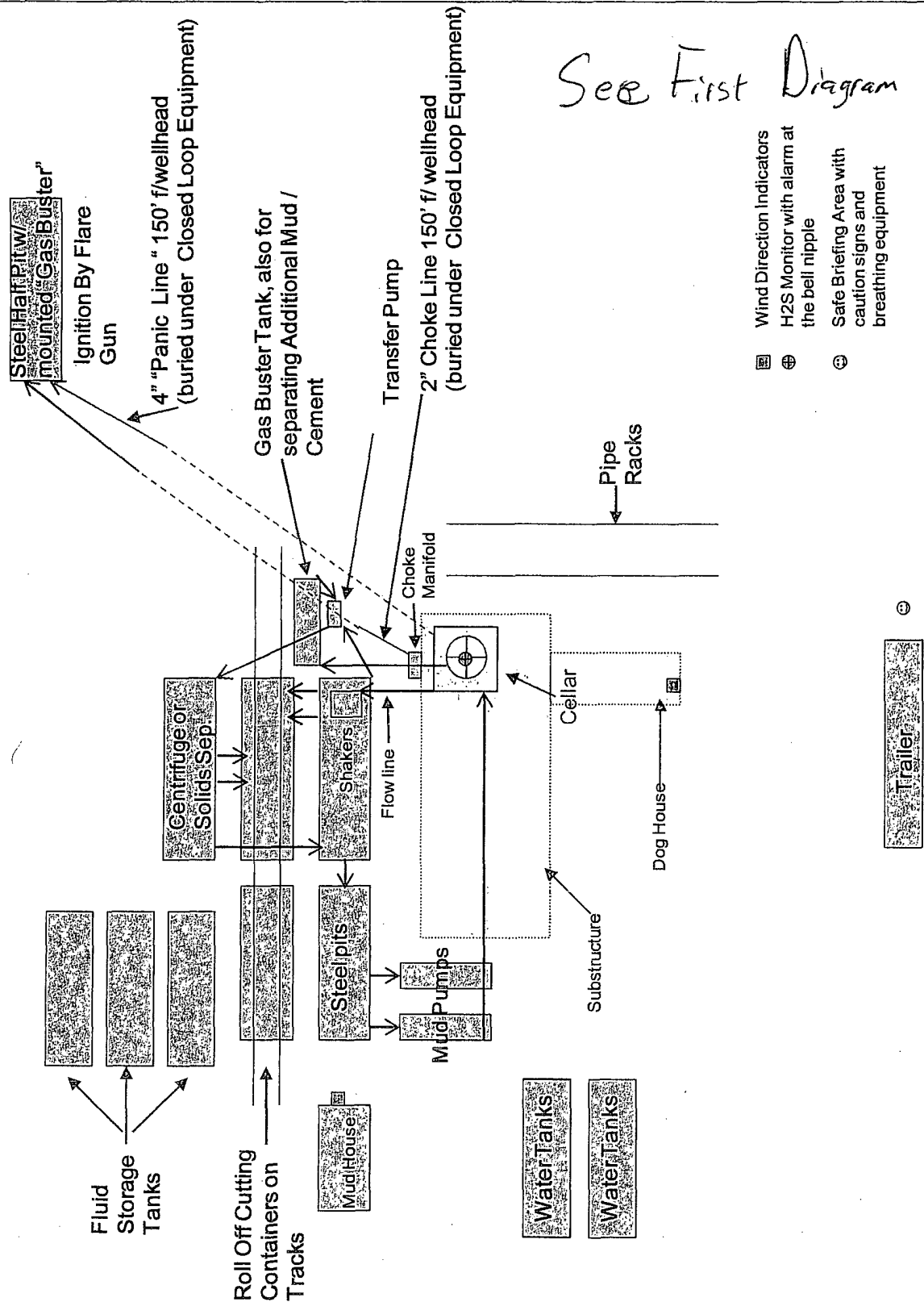
LEA COUNTY EMERGENCY NUMBERS

HOBBS FIRE DEPT. 575-397-9308
HOBBS POLICE DEPT. 575-397-9285
LEA CO. SHERIFF DEPT. 575-396-1196

COG Operating LLC

EXHIBIT 8

Drilling Location - H2S Safety Equipment Diagram



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.
- A. Directions to Location: From the intersection US Highway 82 and Co. Rd. 217 (Hagerman Cutoff), Go North on Co. Rd. 217 approx 0.9 mile. Turn Left & Go West approx 0.9 mile. Turn Right & Go North-Northwest approx 1.0 mile. This location is approx 275 feet East of lease road. See Vicinity Map, Exhibit 3.
- B. 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 0' 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.
- 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.

*Surface Use Plan
COG Operating, LLC
Randall Federal #5
SHL: 1170' FSL & 330' FEL
BHL: 990' FSL & 330' FEL
Section 7, T-17-S, R-30-E, UL P
Eddy County, New Mexico*

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 the Randall Federal #1 Tank Battery located at 330' FSL & 330' FEL, UL P, in Section 7, T17S, R30E, Lease Number NMNM 007752. 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 the Randall Federal #1 Tank Battery located in the 330' FSL & 330' FEL, UL P in Section 7, T17S, R30E, Lease Number NMNM 007752. The flowline will be SDR 7 3" poly line laid on the surface and will be approximately 1184' in length with max pressure 100 psi. Flowlines will be no more than 11' from the paralleling road. The facility location is shown in Exhibit #5.
 - 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 along side 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 South. 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.

Surface Use Plan
COG Operating, LLC
Randall Federal #5
SHL: 1170' FSL & 330' FEL
BHL: 990' FSL & 330' FEL
Section 7, T-17-S, R-30-E, UL P
Eddy County, New Mexico

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 recontoured 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 recontoured 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 revegetated 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-

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Eddy County, New Mexico

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)

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Eddy County, New Mexico

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 20th day of November, 2010.

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

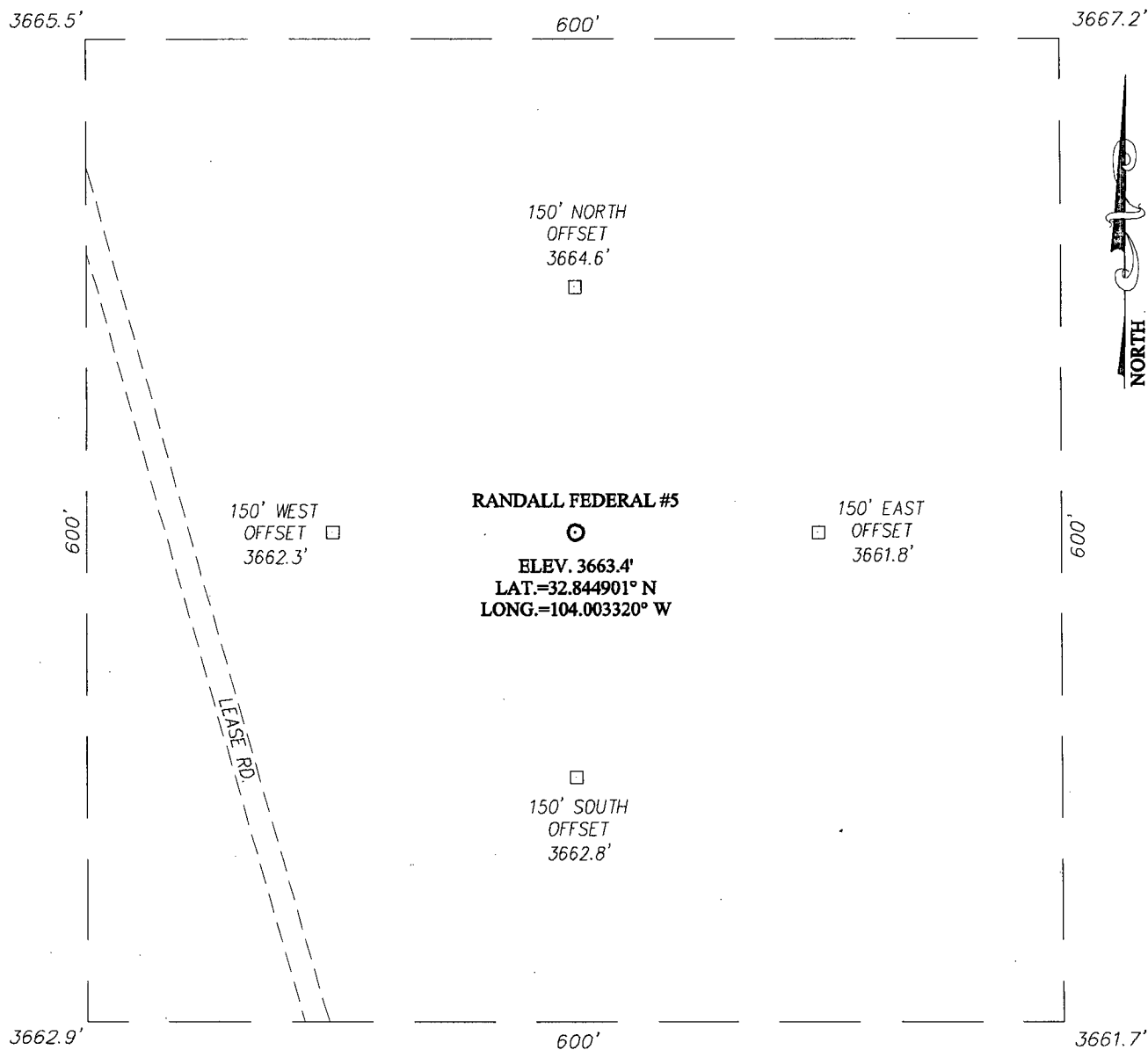
E-mail: cbird@conchoresources.com

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Eddy County, New Mexico

Exhibits:

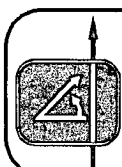
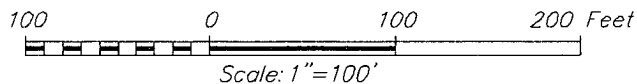
- | | |
|--------------------|--|
| Exhibit #1 | Wellsite and Elevation Plat |
| | Form C-102 Well location and acreage dedication plat |
| Exhibit #2 | Topographic Map (West) |
| Exhibit #3 | Vicinity Map and area roads |
| Exhibit #4 | Elevation Plat (West) |
| Exhibit #5 | Topographic extract showing wells, roads and flowlines |
| Exhibit #6 | Pad Layout and orientation |
| Exhibit #7 | H2S Signage |
| Exhibit #8 | H2S Equipment location |
| Exhibit #9 | BOP and Choke diagrams |
| Exhibit #10 | Form C-144 NMOCD pit permit application |
| Exhibit #11 | 1 Mile Radius List and Map showing all wells permitted, producing and plugged |

SECTION 7, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY. #82 AND CO. RD. #217 (HAGERMAN CUTOFF), GO NORTH ON CO. RD. #217 APPROX. 0.9 MILES. TURN LEFT AND GO WEST APPROX. 0.9 MILES. TURN RIGHT AND GO NORTH APPROX. 1.0 MILE. THIS LOCATION STAKE IS APPROX. 200 FEET EAST OF LEASE RD.



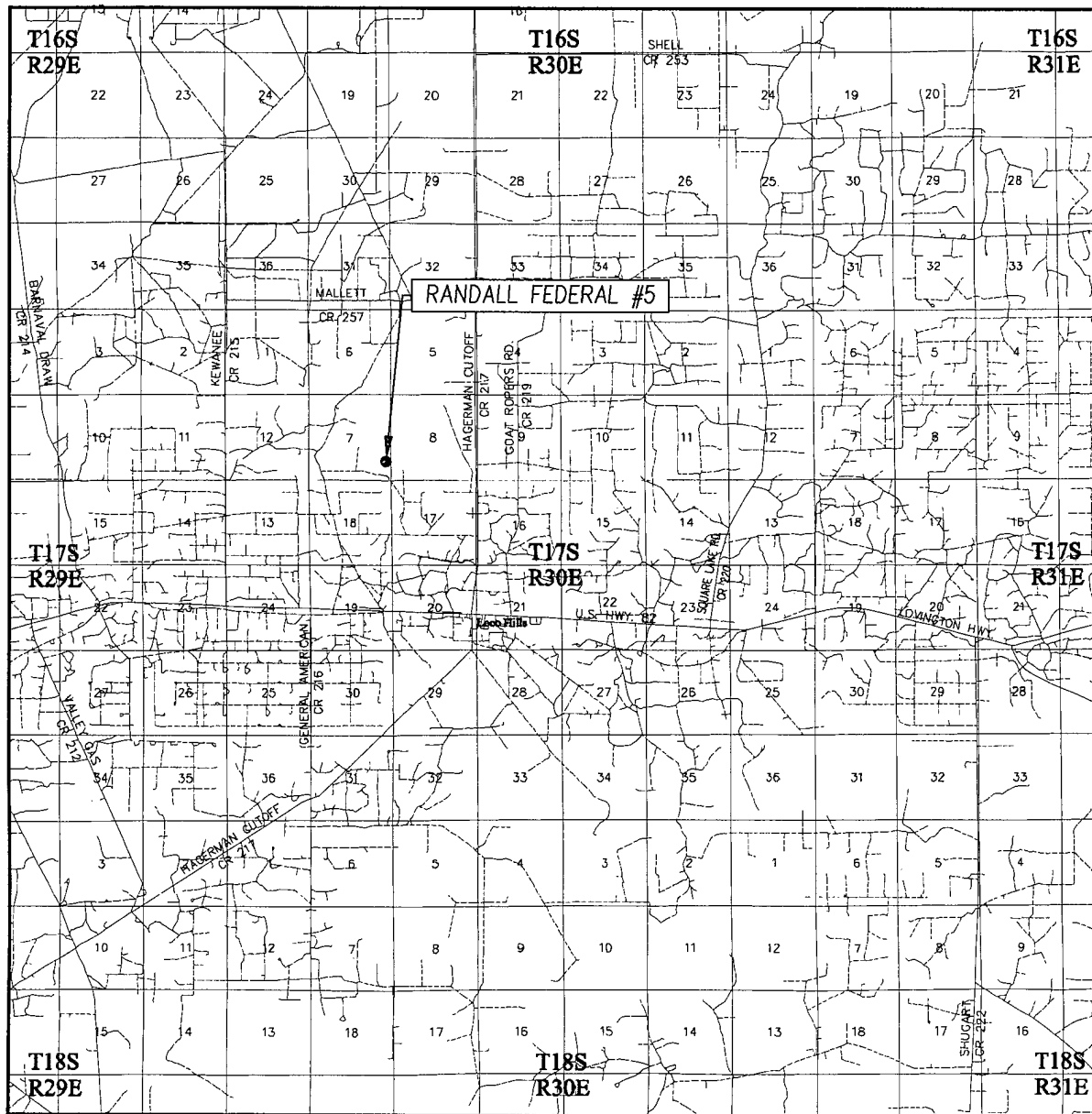
PROVIDING SURVEYING SERVICES
 SINCE 1946
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO
 HOBBS, N.M. 88240
 (575) 393-3117

COG OPERATING, LLC

RANDALL FEDERAL #5 WELL
 LOCATED 1170 FEET FROM THE SOUTH LINE
 AND 330 FEET FROM THE EAST LINE OF SECTION 7,
 TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO

Survey Date: 7/8/10	Sheet 1 of 1 Sheets
W.O. Number: 10.11.0977	Dr By: DSS
Date: 7/14/10	Rev 1: N/A
Rel. W.O.: .	10110977
	Scale: 1"=100'

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 7 TWP. 17-S RGE. 30-E

SURVEY N.M.P.M.

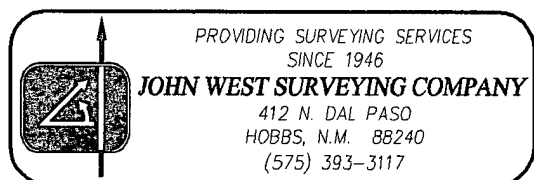
COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 1170' FSL & 330' FEL

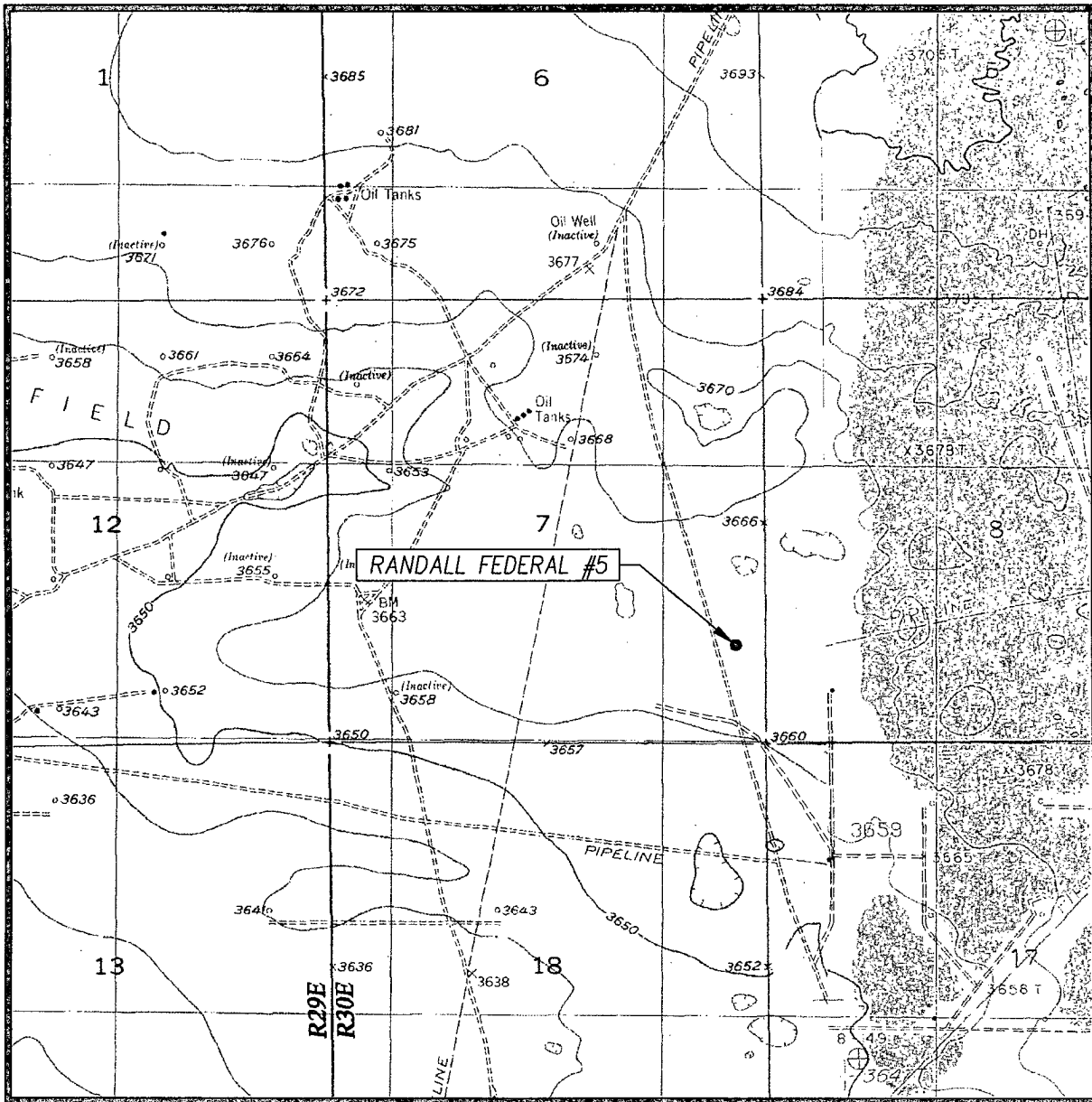
ELEVATION 3663'

OPERATOR COG OPERATING, LLC

LEASE RANDALL FEDERAL



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
LOCO HILLS, N.M. - 10'

SEC. 7 TWP. 17-S RGE. 30-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 1170' FSL & 330' FEL

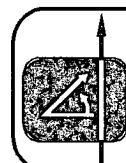
ELEVATION 3663'

OPERATOR COG OPERATING, LLC

LEASE RANDALL FEDERAL

U.S.G.S. TOPOGRAPHIC MAP

LOCO HILLS, N.M.

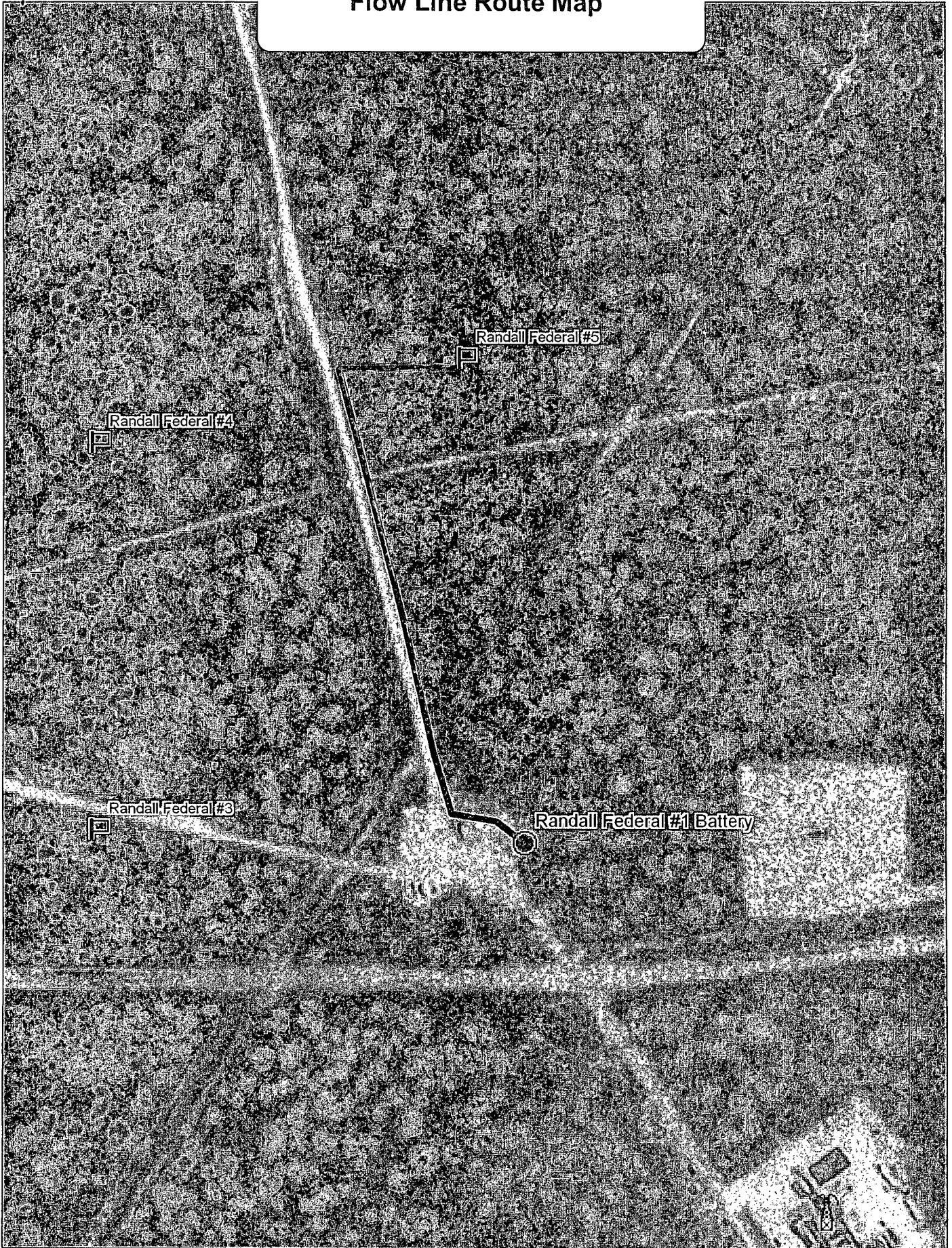


PROVIDING SURVEYING SERVICES
SINCE 1946

JOHN WEST SURVEYING COMPANY

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

Flow Line Route Map



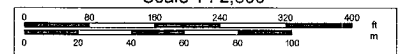
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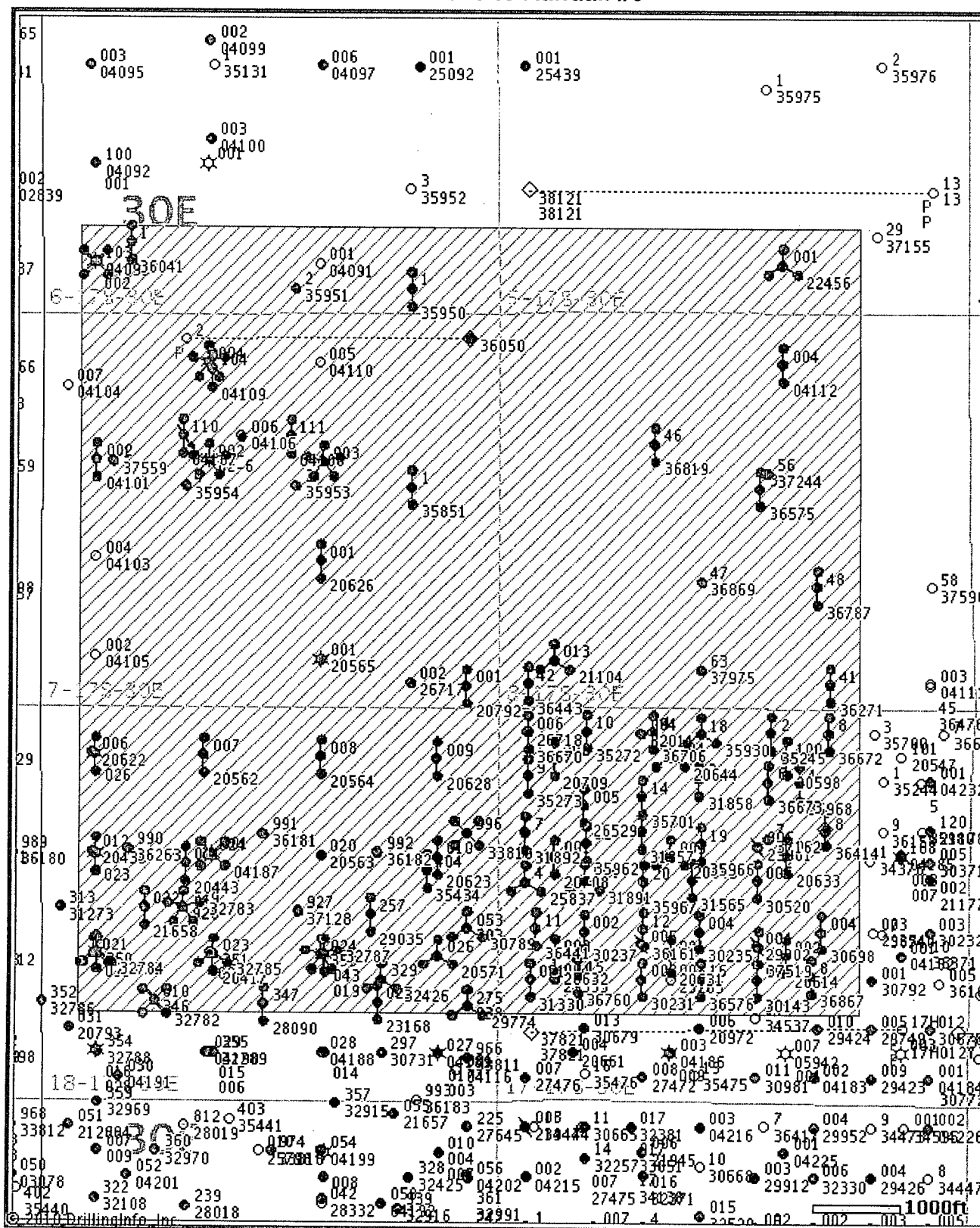
Scale 1 : 2,800



1" = 233.3 ft

Data Zoom 15-5

Offset wells to Randall #5



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Offset wells to Randall #5

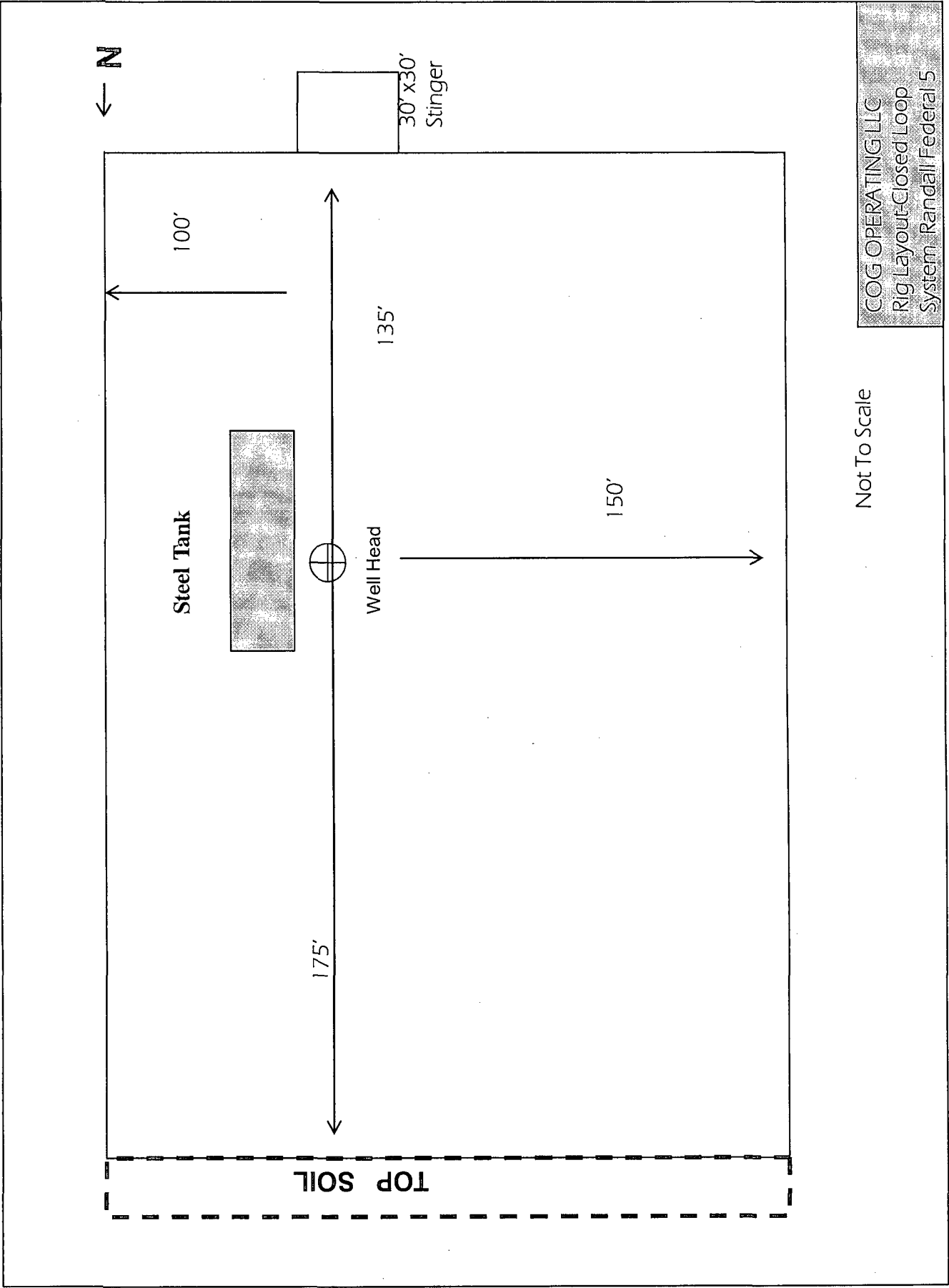
API#	Operator	County	Legal	Lease	Well#	Date Issued	Permitted Depth	Permit TVD	Images	Doc	Total Depth	Well Type	Well Status	Permit#
30-015-37975	BURNETT OIL CO., INC.	EDDY	S:8, T:17S, R:30E	GISSLER "B"	63	7/1/2010	6,100		Yes	link	6,100	PO	Active Permit	TEMP49072769
30-015-37519	MARBOB ENERGY CORP	EDDY	S:17, T:17S, R:30E	RED FEDERAL	6	1/9/2010	6,000		Yes	link	6,000	O	Active Permit	TEMP1575921687
	MEWBOURNE OIL COMPANY			SKYHAWK "B"										
30-015-37559	BURNETT OIL CO., INC.	EDDY	S:7, T:17S, R:30E	FEDERAL COM	1	11/9/2009	11,200		Yes	link	11,200	PG	Active Permit	TEMP655683973
30-015-37244	MARBOB ENERGY CORP	EDDY	S:8, T:17S, R:30E	GISSLER "B"	56	8/26/2009	4,250		Yes	link	4,250	PO	Active Permit	TEMP1916938808
30-015-37162	MARBOB ENERGY CORP	EDDY	S:17, T:17S, R:30E	BIRDIE FEDERAL	7	7/10/2009	6,000		Yes	link	6,000	PO	Active Permit	TEMP885711435
30-015-37128	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	927	6/15/2009	4,800		Yes	link	4,800	PO	Active Permit	TEMP1496858484
30-015-36869	BURNETT OIL CO., INC.	EDDY	S:8, T:17S, R:30E	GISSLER B	47	12/30/2008	6,000		Yes	link	6,000	PO	Active Permit	TEMP1746988937
	MARBOB ENERGY CORPORATION or MARBOB ENERGY CORP			RED FEDERAL										
30-015-36867	BURNETT OIL CO., INC.	EDDY	S:17, T:17S, R:30E	RED FEDERAL	8	12/19/2008	5,930		Yes	link	5,930	O	Active Permit	TEMP259748076
30-015-36819	BURNETT OIL CO., INC.	EDDY	S:8, T:17S, R:30E	GISSLER B	46	11/27/2008	6,000		Yes	link	6,000	O	Active Permit	TEMP1751416149
30-015-36787	BURNETT OIL CO., INC.	EDDY	S:8, T:17S, R:30E	GISSLER "B"	48	11/10/2008	6,000		Yes	link	6,000	O	Active Permit	TEMP1170166389
	MARBOB ENERGY CORPORATION or MARBOB ENERGY CORP			BIRDIE FEDERAL										
30-015-36760	COG OPERATING LLC	EDDY	S:17, T:17S, R:30E	POLARIS B FEDERAL	15	10/29/2008	5,930		Yes	link	6,000	O	Active Permit	TEMP697644370
30-015-36706	COG OPERATING, LLC or COG OPERATING LLC	EDDY	S:17, T:17S, R:30E	HOLDER CB FEDERAL	4	10/7/2008	5,900		Yes	link	5,926	O	Active Permit	TEMP1458587237
30-015-36670	COG OPERATING, LLC or COG OPERATING LLC	EDDY	S:17, T:17S, R:30E	CADDO FEDERAL	20	9/29/2008	5,900		Yes	link	5,920	O	Active Permit	TEMP1753053329
30-015-36673	COG OPERATING, LLC or COG OPERATING LLC	EDDY	S:17, T:17S, R:30E	CADDO FEDERAL	6	9/29/2008	5,900		Yes	link	5,920	O	Active Permit	TEMP1509459135
30-015-36672	BURNETT OIL CO., INC.	EDDY	S:17, T:17S, R:30E	CADDO FEDERAL	8	9/29/2008	5,900		Yes	link	5,925	O	Active Permit	TEMP2067259444
30-015-36575	MARBOB ENERGY CORPORATION or MARBOB ENERGY CORP	EDDY	S:8, T:17S, R:30E	GISSLER B	039	8/20/2008	6,000		Yes	link	6,000	O	Active Permit	TEMP367386786
	MARBOB ENERGY CORPORATION or MARBOB ENERGY CORP			BIRDIE FEDERAL										
30-015-36576	MARBOB ENERGY CORPORATION or MARBOB ENERGY CORP	EDDY	S:17, T:17S, R:30E	BIRDIE FEDERAL	016	8/18/2008	5,930		Yes	link	5,900	O	Active Permit	TEMP1767630833
30-015-36441	BURNETT OIL CO., INC.	EDDY	S:17, T:17S, R:30E	BIRDIE FEDERAL	11	7/18/2008	5,930		Yes	link	6,000	O	Active Permit	TEMP1895304973

30-015-36443	INC.	EDDY	S:8, T:17S, R:30E	GISSLER B	42	7/16/2008	6,000		Yes	link	6,000	O	Active Permit	TEMP879752047
	MARBOB ENERGY CORPORATION or MARBOB ENERGY CORP	EDDY	S:17, T:17S, R:30E	BIRDIE FEDERAL	8	7/2/2008	5,930		Yes	link	6,000	O	Active Permit	TEMP2086678524
30-015-36263	MARBOB ENERGY CORPORATION or MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	990	4/4/2008	4,800		Yes	link	4,800	PO	Active Permit	TEMP261370445
30-015-36271	BURNETT OIL CO., INC.	EDDY	S:8, T:17S, R:30E	GISSLER B	41	3/31/2008	6,000		Yes	link	6,000	O	Active Permit	TEMP2026268295
30-015-36161	MARBOB ENERGY CORPORATION or MARBOB ENERGY CORP	EDDY	S:17, T:17S, R:30E	BIRDIE FEDERAL	12	2/26/2008	5,930		Yes	link	5,907	O	Active Permit	TEMP1790148084
30-015-36182	MARBOB ENERGY CORPORATION or MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	992	2/22/2008	4,800		Yes	link	4,800	PO	Active Permit	TEMP1287518544
30-015-36181	MARBOB ENERGY CORPORATION or MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	991	2/22/2008	4,800		Yes	link	4,800	PO	Active Permit	TEMP188993533
30-015-36050	MACK ENERGY CORP	EDDY	S:7, T:17S, R:30E	BRANTLEY FEDERAL	2	1/11/2008	10,560	7,565	Yes	link	10,560	PO	Active Permit	TEMP1557094361
30-015-35962	COG OPERATING LLC	EDDY	S:17, T:17S, R:30E	HOLDER CB FEDERAL	12	12/5/2007	5,850		Yes	link	5,880	O	Active Permit	TEMP1475472742
30-015-35966	COG OPERATING LLC	EDDY	S:17, T:17S, R:30E	POLARIS B FEDERAL	19	12/5/2007	5,850		Yes	link	5,851	O	Active Permit	TEMP1143696911
30-015-35967	COG OPERATING LLC	EDDY	S:17, T:17S, R:30E	POLARIS B FEDERAL	20	12/5/2007	5,850		Yes	link	5,867	O	Active Permit	TEMP884314856
30-015-35968	COG OPERATING LLC	EDDY	S:17, T:17S, R:30E	CADDO FEDERAL	4	12/5/2007	5,900		Yes	link	5,924	O	Active Permit	TEMP1251673958
30-015-35950	MACK ENERGY CORP	EDDY	S:6, T:17S, R:30E	AVALON FEDERAL	1	11/29/2007	6,100		Yes	link	5,820	O	Active Permit	TEMP1565487079
30-015-35951	MACK ENERGY CORP	EDDY	S:6, T:17S, R:30E	AVALON FEDERAL	2	11/29/2007	6,100		Yes	link	6,100	PO	Active Permit	TEMP1011685564
30-015-35953	MACK ENERGY CORP	EDDY	S:7, T:17S, R:30E	BRANTLEY FEDERAL	3	11/29/2007	6,100		Yes	link	6,100	PO	Active Permit	TEMP1609718130
30-015-35930	COG OPERATING LLC	EDDY	S:17, T:17S, R:30E	POLARIS B FEDERAL	18	11/15/2007	5,850		Yes	link	5,875	O	Active Permit	TEMP1961177340
30-015-35851	MACK ENERGY CORP	EDDY	S:7, T:17S, R:30E	BRANTLEY FEDERAL	1	10/4/2007	6,500		Yes	link	6,458	O	Active Permit	TEMP583454294
30-015-35954	MACK ENERGY CORP	EDDY	S:7, T:17S, R:30E	BRANTLEY FEDERAL	4	10/4/2007	6,500		Yes	link	6,500	PO	Active Permit	TEMP1762603005
30-015-35701	COG OPERATING LLC	EDDY	S:17, T:17S, R:30E	POLARIS B FEDERAL	14	6/30/2007	6,500		Yes	link	5,997	O	Active Permit	TEMP598326465
30-015-36041	CHI OPERATING INC	EDDY	S:6, T:17S, R:30E	PINON FEDERAL COM.	1	3/30/2007	11,300		Yes	link	11,120	G	Active Permit	TEMP2015074707
30-015-35434	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	987	1/3/2007	4,800		Yes	link	4,720	O	Active Permit	TEMP320336722
30-015-35272	COG OPERATING LLC	EDDY	S:17, T:17S, R:30E	HOLDER CB FEDERAL	010	12/7/2006	6,000		Yes	link	6,015	O	Active Permit	TEMP2096125189
30-015-35273	COG OPERATING LLC	EDDY	S:17, T:17S, R:30E	HOLDER CB FEDERAL	009	12/7/2006	6,000		Yes	link	6,030	O	Active Permit	TEMP891258555
	COG OPERATING			CADDO										

30-015-35245	LLC	EDDY	S:17, T:17S, R:30E	FEDERAL	002	11/21/2006	6,000		Yes	link	6,030	O	Active	TEMP472388836
30-015-33810	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	965	12/28/2005	4,800		Yes	link	4,800	PO	Active	TEMP2041998017
30-015-33810	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	965	9/15/2004	4,800		No	link	4,800	PO	Active	TEMP679565141
30-015-33810	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	965	8/31/2004			No	link	4,800	PO	Active	TEMP364569694
30-015-32787	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	353	7/29/2003			No	link	4,730	O	Active	TEMP1836978264
30-015-32785	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	351	7/28/2003			No	link	4,710	O	Active	TEMP1013246193
30-015-32782	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	346	7/1/2003			No	link	4,715	O	Active	TEMP1576883403
30-015-32783	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	349	6/30/2003			No	link	4,710	O	Active	TEMP1999687778
30-015-32782	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	810	5/6/2003	4,800		No	link	4,715	O	Active	TEMP1406308729
30-015-32783	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	926	5/6/2003	4,800		No	link	4,710	O	Active	TEMP1063882208
30-015-32784	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	928	5/6/2003	4,800		No	link	4,710	O	Active	TEMP1136984499
30-015-32785	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	929	5/6/2003	4,800		No	link	4,710	O	Active	TEMP1114284314
30-015-32787	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	931	5/6/2003	4,800		No	link	4,730	O	Active	TEMP1741569218
30-015-32811	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	926	5/6/2003	4,800		No	link	4,800	O	Active	TMP000000009530
30-015-28090	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	347	5/6/2003			No	link	4,705	O	Active	TEMP324804333
30-015-32784	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	350	4/30/2003			No	link	4,710	O	Active	TEMP428812811
30-015-32811	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	926	4/30/2003			No	link	4,800	O	Active	TEMP681938119
30-015-04187	CONOCOPHILLIPS COMPANY	EDDY	S:18, T:17S, R:30E	GRAYBURG DEEP UNIT	001	1/1/2003	0		No	link	0	G	Flowing	TEMP436328120
30-015-20643	CBS OPERATING CORPORATION or CBS OPERATING CORP	EDDY	S:17, T:17S, R:30E	LOCO HILLS B FEDERAL	003	9/1/2002			No	link	3,638	O	Pumping	TEMP1334839633
30-015-20644	CBS OPERATING CORPORATION or CBS OPERATING CORP	EDDY	S:17, T:17S, R:30E	LOCO HILLS B FEDERAL	004	9/1/2002			No	link	3,712	O	Active	TEMP1455266039
30-015-32426	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	887	8/30/2002	4,800		No	link	4,825	O	Active	TEMP935548483
30-015-32426	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	329	7/31/2002			No	link	4,825	O	Active	TEMP1322216889
30-015-32011	MACK ENERGY CORP	EDDY	S:17, T:17S, R:30E	POLARIS B FEDERAL	004	9/26/2001			No	link		O	Active	TEMP312042190
30-015-31891	MACK ENERGY CORP	EDDY	S:17, T:17S, R:30E	HOLDER CB FEDERAL	006	7/17/2001			No	link	6,211	O	Pumping	TEMP1309827666
30-015-31892	MACK ENERGY CORP	EDDY	S:17, T:17S, R:30E	HOLDER CB FEDERAL	007	7/17/2001			No	link	4,770	O	Pumping	TEMP1678147616
	MACK ENERGY			POLARIS B										

30-015-31857	CORP	EDDY	S:17, T:17S, R:30E	FEDERAL	002	6/27/2001			No	link	4,715	O	Pumping	TEMP196094853
30-015-31858	MACK ENERGY CORP	EDDY	S:17, T:17S, R:30E	POLARIS B FEDERAL	003	6/27/2001			No	link	6,013	O	Pumping	TEMP563914802
30-015-31565	MACK ENERGY CORP	EDDY	S:17, T:17S, R:30E	POLARIS B FEDERAL	001	11/21/2000	5,000		Yes	link	4,740	PO	Pumping	TEMP1337606208
30-015-31330	MARBOB ENERGY CORP	EDDY	S:17, T:17S, R:30E	BIRDIE FEDERAL	001	9/5/2000			No	link	4,772	O	Pumping	TEMP2042958211
30-015-30789	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	303	10/15/1999			No	link	4,703	O	Pumping	TEMP342032585
30-015-27649	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH C FEDERAL	053	8/12/1999	0		No	link	4,703	PO	Unknown	TEMP1774965539
30-015-30698	MARBOB ENERGY CORP	EDDY	S:17, T:17S, R:30E	RED FEDERAL	004	7/16/1999			No	link	4,765	O	Pumping	TEMP1478061220
30-015-28091	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	810	2/10/1999			No	link	4,715	X	Cancelled	TEMP905002304
30-015-29901	SOUTHWEST ROYALTIES INC	EDDY	S:17, T:17S, R:30E	ARCO FEDERAL	006	1/12/1999			No	link		X	Cancelled	TEMP4104270
30-015-29902	SOUTHWEST ROYALTIES INC	EDDY	S:17, T:17S, R:30E	MCINTYRE FEDERAL	004	1/12/1999			No	link		X	Cancelled	TEMP128762914
30-015-30520	MARBOB ENERGY CORP	EDDY	S:17, T:17S, R:30E	BIRDIE FEDERAL	006	11/30/1998			No	link	4,729	O	Pumping	TEMP1403677394
30-015-29335	SOUTHWEST ROYALTIES INC	EDDY	S:17, T:17S, R:30E	ARCO FEDERAL	005	5/27/1998			No	link		X	Cancelled	TEMP1086844397
30-015-29355	SOUTHWEST ROYALTIES INC	EDDY	S:17, T:17S, R:30E	ARCO FEDERAL	004	5/27/1998			No	link		PO	Unknown	TEMP1959444153
30-015-30231	MARBOB ENERGY CORP	EDDY	S:17, T:17S, R:30E	BIRDIE FEDERAL	003	4/29/1998			No	link	4,900	O	Pumping	TEMP1764915333
30-015-30235	MARBOB ENERGY CORP	EDDY	S:17, T:17S, R:30E	BIRDIE FEDERAL	004	4/29/1998			No	link	4,735	O	Pumping	TEMP1874568770
30-015-30237	MARBOB ENERGY CORP	EDDY	S:17, T:17S, R:30E	BIRDIE FEDERAL	002	4/29/1998			No	link	4,723	O	Pumping	TEMP2066558471
30-015-30143	MARBOB ENERGY CORP	EDDY	S:17, T:17S, R:30E	RED FEDERAL	002	3/6/1998			No	link	4,815	O	Pumping	TEMP697252460
30-015-04107	RODNEY B WEBB DBA WEBB OIL CO	EDDY	S:7, T:17S, R:30E	SQUARE LAKE 12 UNIT	110	1/1/1998	0		No	link	0	I	Injection Well	TEMP687877518
30-015-04108	RODNEY B WEBB DBA WEBB OIL CO	EDDY	S:7, T:17S, R:30E	SQUARE LAKE 12 UNIT	111	1/1/1998	0		No	link	0	O	Pumping	TEMP712886197
30-015-04109	RODNEY B WEBB DBA WEBB OIL CO	EDDY	S:7, T:17S, R:30E	SQUARE LAKE 12 UNIT	104	1/1/1998	0		No	link	0	O	Pumping	TEMP819461642
30-015-27651	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH AA FEDERAL	038	8/1/1997	0		No	link	4,747	PO	Unknown	TEMP1538344966
30-015-29774	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	275	8/1/1997			No	link	4,748	O	Pumping	TEMP728171052
30-015-29035	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	257	7/3/1996			No	link	4,875	O	Pumping	TEMP916739410
30-015-26529	MACK ENERGY CORP	EDDY	S:17, T:17S, R:30E	HOLDER CB FEDERAL	005	2/1/1991			No	link	4,700	PO	Pumping	TEMP1089164925
30-015-22456	MACK ENERGY CORP	EDDY	S:5, T:17S, R:30E	GISSLER FEDERAL	001	8/1/1990	0		No	link	11,150	O	Pumping	TEMP1766333904
30-015-25837	MACK ENERGY CORP	EDDY	S:17, T:17S, R:30E	HOLDER CB FEDERAL	004	1/1/1988			No	link	5,850	O	Pumping	TEMP68932315

30-015-23168	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	025	3/1/1981	0	No	link	3,600	O	Pumping	TEMP1262964397
30-015-21658	MARBOB ENERGY CORP	EDDY	S:18, T:17S, R:30E	BURCH KEELY UNIT	022	3/1/1976	0	No	link	3,300	O	Pumping	TEMP791907506
30-015-21104	BURNETT OIL CO INC	EDDY	S:8, T:17S, R:30E	GISSLER B	013	11/1/1974	0	No	link	2,870	O	Pumping	TEMP1383533939
30-015-26717	STEVENS OPERATING CORPORATION or HANAGAN PETROLEUM CORP	EDDY	S:7, T:17S, R:30E	PRE-ONGARD WELL	002	1/1/1970		No	link		PO	Active Permit	TEMP430777921
30-015-26718	STEVENS OPERATING CORPORATION or HANAGAN PETROLEUM CORP	EDDY	S:17, T:17S, R:30E	PRE-ONGARD WELL	006	1/1/1970		No	link		PO	Active Permit	TEMP399613260



Not To Scale

COG OPERATING LLC
Rig Layout-Closed Loop
System-Randall Federal 5

310



← N

This are will be reclaimed to the anchors on steel pit side. 50' will be reclaimed towards the wellhead

60' will be reclaimed on backside of pad

anchor



anchor



Well Head

anchor

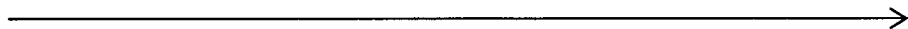


anchor



Stinger removed
30' X 30' Stinger

250



COG OPERATING LLC
Rig Layout-Closed Loop
Interim reclamation plat

Not To Scale

Exhibit #6