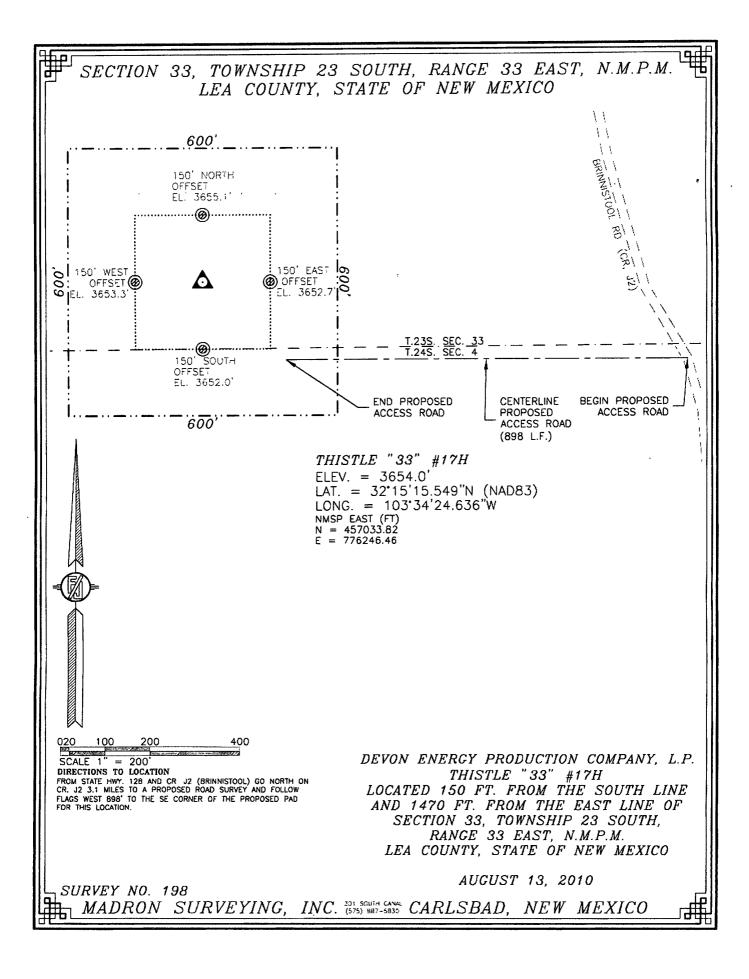
| District I   | State of New Mexico                     | Form C-102                     |
|--|---|--------------------------------|
| 1625 N. French Dr., Hobbs, NM 88240                        | Minerals & Natural Resources Department | Revised October 15,2009        |
|  | OT CONTERNATION DIVICIONI               | Submit one copy to appropriate |
| 1301 W. Grand Avenue, Artesia, NM 88210                    | OIL CONSERVATION DIVISION               | District Office                |
| District III 1000 Rio Brazos Rd., Aztec, NM 87416 AUG 27 2 | 010 1220 South St. Francis Dr.          | 5.55.00                        |
| District IV 1220 S. St. Francis Dr., Santa Fe, NM SA HOURS | Santa Fe, NM 87505                      | ☐ AMENDED REPORT               |
| 1220 S. St. Francis Dr., Santa Fe, NM 8750                 |   |                                |
| WELL I   | OCATION AND ACREAGE DEDICATION          | PLAT 2                         |

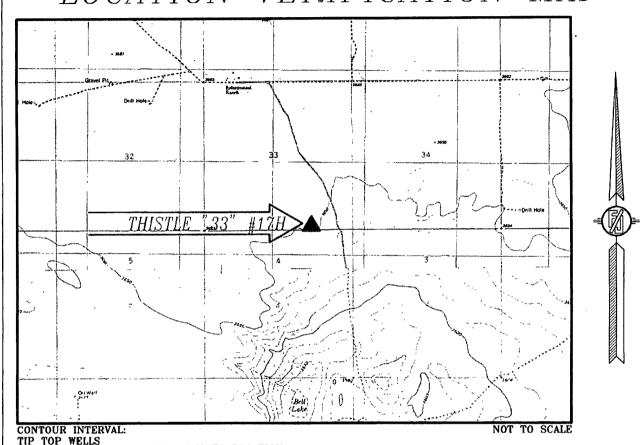
| API Number Pool Code                     |                     |                |             |           |               | 1110  |                          |           |                        |        |
|--|---------------------|----------------|-------------|-----------|---------------|---|--------------------------|-----------|------------------------|--------|
| 30.025-39893 96193 CBRUSHY CANYON Delaux |                     |                |             |           |               |   | laware                   |           |                        |        |
| <sup>4</sup> Property Code               |                     |                |             |           | 5 Property    |   | <sup>6</sup> Well Number |           |                        |        |
| 3098                                     | 4 THISTLE "33" Unit |                |             |           |               |   |                          | 17H       |                        |        |
| 7 OGRID N                                | 0.                  |                |             |           | 8 Operator    | r Name  |                          |           | <sup>9</sup> Elevation |        |
| 6137                                     |                     |                | DEV         | ON ENEI   | RGY PRODU     | CTION COMPA   | NY, L.P.                 |           |                        | 3654.0 |
|  |                     |                |             |           | 10 Surface    | Location  |                          |           |                        |        |
| UL or lot no.                            | Section             | Township       | Range       | Lot Idn   | Feet from the | North/South line  | Feet from the            | East/We   | st line                | County |
| 0  | 33                  | 23 S           | 33 E        |           | 150           | SOUTH   | 1470                     | 1470 EAST |                        | LEA    |
|  |                     |                | " Bo        | ttom Ho   | le Location   | lf Different Fron   | n Surface                |           |                        |        |
| UL or lot no.                            | Section             | Township       | Range       | Lot ldn   | Peet from the | et from the North/South line Feet from the East/West line |                          |           |                        | County |
| В  | 33                  | 23 S           | 33 E        |           | 150           | NORTH   | 2490                     | EAS       | ST                     | LEA    |
| 12 Dedicated Acres                       | 13 Joint o          | r Infill 14 Co | nsolidation | Code 13 O | rder No.      |   |                          |           |                        |        |
| 160                                      |                     |                |             |           |               |   |                          |           |                        |        |

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

|                        |                        | Tr + Tr + #                              |                          | ir  |
|------------------------|------------------------|--|--------------------------|---|
|                        | N. O. CORNER SEC. 33   | 14 14                                    | I                        | 17 OPERATOR CERTIFICATION   |
| <b>    </b>            | LAT. = 32'16'06.43"N   | 2  | 490'                     | I hereby certify that the information contained herein is true and complete |
| 11 1                   | LONG. = 103'34'38.24"W | Polition -                               | NE CORNER SEC. 33        | to the best of my knowledge and belief, and that this organization either   |
| 11 1                   | NMSP EAST (FT)         | OF HOLE                                  | LAT. = 32 16 06,39 N     | owns a working interest or indeased mineral interest in the land including  |
|                        | N = 462168.17          |  | I LONG. = 103'34'07.55"W | "   |
| <b>U</b> I             | E = 775041.37          | 4  | NMSP EAST (FT)           | the proposed bottom hole location or has a right to drift this well at this |
|                        | 1                      | BOTTOM OF HOLE,                          | N = 462183.62            | location pursuant to a contract with an owner of such a mineral or working  |
|                        | !                      | LAT. = 32'16'04.94"N                     | E = 777677.23            | interest, or to a voluntary pooling agreement or a compilisory pooling      |
|                        | !<br>[                 | LONG. = 103'34'36.54'W<br>NMSP EAST (FT) | 1                        | order heretofore entered by the division.                                   |
|                        |                        | NMSP (ASI (FI)                           |                          | · .   |
|                        |                        | E = 775188.35                            | i                        |   |
|                        | 1                      |  | y                        |   |
|                        | ۱ /                    | γ ;                                      | 1                        | <b> </b>  |
|                        | !                      | !  | !                        |   |
|                        |                        | !  | <i>b</i> . I             | Jan 121/ 8/26/10  |
|                        | !                      | ;  | 1                        | Signature Date  |
|                        |                        | 6  | 1                        | Printed Name SPENCE LAIRD   |
| 1                      | ,                      |  | <i>y</i>                 | TIMES CHAIRD  |
|                        | <u></u>                | i  | i                        | KOLIDVEVOD GEDTEGATION  |
| i                      | 1                      | <u> </u>                                 | 1                        | *SURVEYOR CERTIFICATION   |
|                        | آر ا                   | <b>?</b>                                 |                          | I hereby certify that the well location shown on this                       |
|                        | !                      | ١,                                       | <b>y</b>                 | plat was plotted from field notes of actual surveys                         |
|                        | ļ ,                    | w  |                          | 1   |
|                        |                        | THISTLE "33"                             |                          | made by me or under my supervision, and that the                            |
|                        | ]<br>]                 | ELEV. = 3654.0'                          |                          | same is true and correct to the best of my belief.                          |
|                        | 1<br>1                 | LAT. = $32^{15}$                         | 549"N (NAD83)            | AUGUST 13. 2010   |
|                        |                        | $LONG. = 103^{\circ}34$                  | 24.636"W                 | N MEY   |
|                        |                        | MMSP EAST (FT) //                        | /=                       | Date of Survey  |
| []                     | 7                      | (N = 457033.82 / / )                     | ie l                     | N SELLY YOUR IN   |
|                        | !                      | E = 776246.46///                         | SE CORNER SEC. 33        | 1 12797 1   |
| SW CORNER SEC. 33      |                        |  | LAT. = 32 15 14.06"N     | Wash, Xilleha Ella  |
| LAT. = 32'15'14.11"N   | ' i                    |  | LONG. = 103'34'07.52"W   | ~ V WORK SOMEWIND OF LO   |
| LONG. = 103'35'08.94"W | ا                      | SUBEACE / S                              | NMSP EAST (FT)           | Signature and Settle Professional Surveyor                                  |
| NMSP EAST (FT)         |                        | / /SURFACE/ / / / / /                    | N = 456893.46            | Certificate Number AULIMON JARANICLO, PLS 12797                             |
| N = 456861.33          |                        | LOCATION                                 | E = 777717.59            | AND SURVEY NO. 198  |
| E = 772441.83          | i l                    | ///////*                                 | 1470′                    | **************************************                                      |
|                        |                        |  | <u></u>                  | JI  |



# SECTION 33, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M. LEA COUNTY, STATE OF NEW MEXICO LOCATION VERIFICATION MAP



DIRECTIONS TO LOCATION

FROM STATE HWY. 128 AND CR. J2 (BRINNISTOOL) GO NORTH ON CR. J2 3.1 MILES TO A PROPOSED ROAD SURVEY AND FOLLOW FLAGS WEST 898' TO THE SE CORNER OF THE PROPOSED PAD FOR THIS LOCATION.

 SEC.
 33
 TWP.
 23-S
 RGE.
 33-E

 SURVEY
 N.M.P M.
 N.M.P M.
 N.M.P M.
 N.M.P M.
 NEW MEXICO

 DESCRIPTION
 150' FSL & 1470' FEL
 ELEVATION
 3654.0'
 OPERATOR DEVON ENERGY PRODUCTION COMPANY, LP

 LEASE
 THISTLE

DEVON ENERGY PRODUCTION COMPANY, L.P.

THISTLE "33" #17H

LOCATED 150 FT. FROM THE SOUTH LINE
AND 1470 FT. FROM THE EAST LINE OF
SECTION 33, TOWNSHIP 23 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

AUGUST 13, 2010

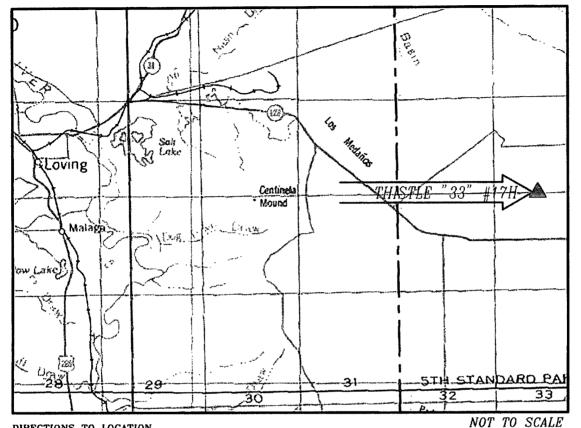
SURVEY NO. 198

MADRON SURVEYING, INC. 501 SOUTH CANAL CARLSBAD, NEW MEXICO

SECTION 33, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.

LEA COUNTY, STATE OF NEW MEXICO

### VICINITY MAP



**DIRECTIONS TO LOCATION**FROM STATE HWY. 128 AND CR. J2 (BRINNISTOOL) GO NORTH ON CR J2 3.1 MILES TO A PROPOSED ROAD SURVEY AND FOLLOW FLAGS WEST 898' TO THE SE CORNER OF THE PROPOSED PAD FOR THIS LOCATION.

 SEC.
 33
 TWP.
 23-S
 RCE.
 33-E

 SURVEY
 N M.P.M.
 N M.

DEVON ENERCY PRODUCTION COMPANY, L.P.

THISTLE "33" #17H

LOCATED 150 FT. FROM THE SOUTH LINE

AND 1470 FT. FROM THE EAST LINE OF

SECTION 33, TOWNSHIP 23 SOUTH,

RANGE 33 EAST, N.M.P.M.

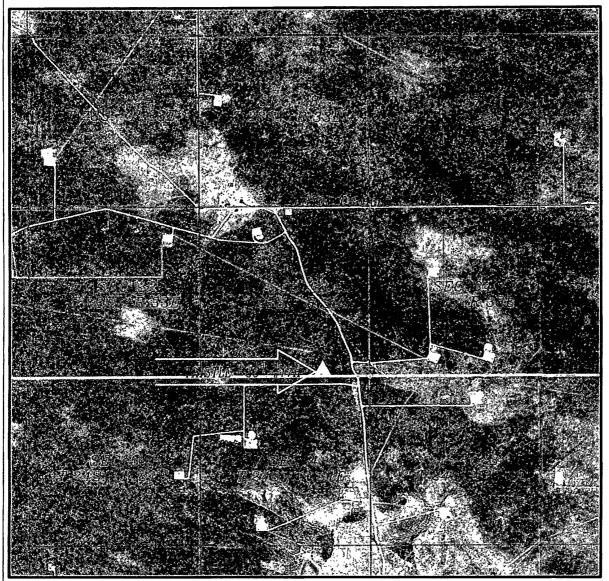
LEA COUNTY, STATE OF NEW MEXICO

AUGUST 13, 2010

SURVEY NO. 198

MADRON SURVEYING, INC. 301 SQUITH CANAL CARLSBAD, NEW MEXICO

# SECTION 33, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M. LEA COUNTY, STATE OF NEW MEXICO AERIAL PHOTO



NOT TO SCALE AERIAL PHOTO: GOOGLE EARTH USDA - AUG, 2009

DEVON ENERGY PRODUCTION COMPANY, L.P.

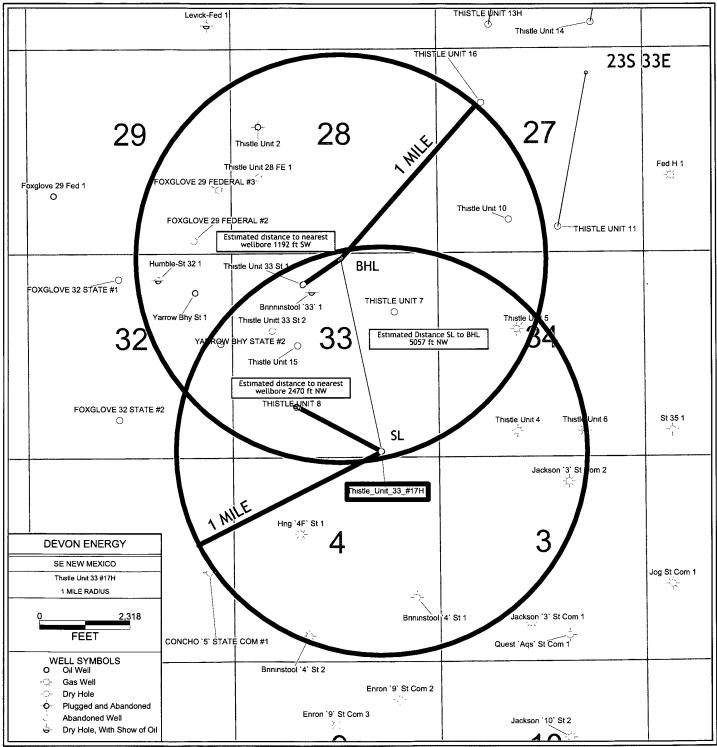
THISTLE "33" #17H

LOCATED 150 FT. FROM THE SOUTH LINE
AND 1470 FT. FROM THE EAST LINE OF
SECTION 33, TOWNSHIP 23 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

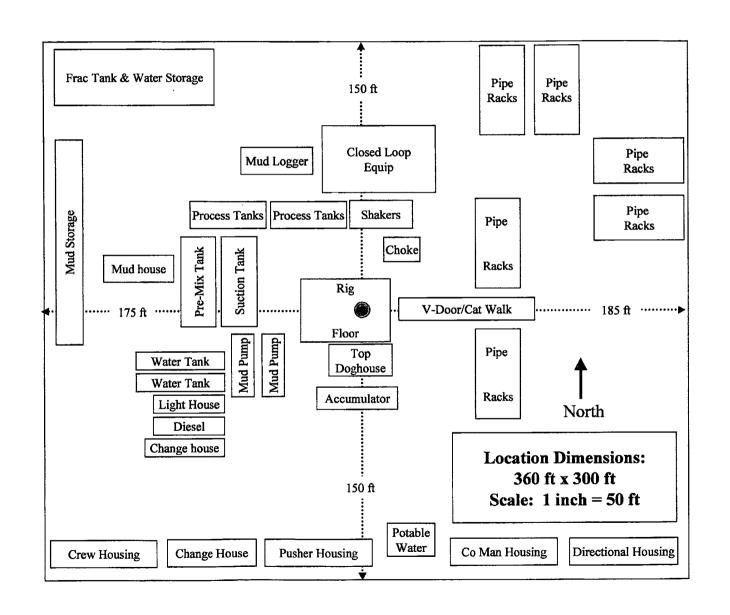
AUGUST 13, 2010

SURVEY NO. 198

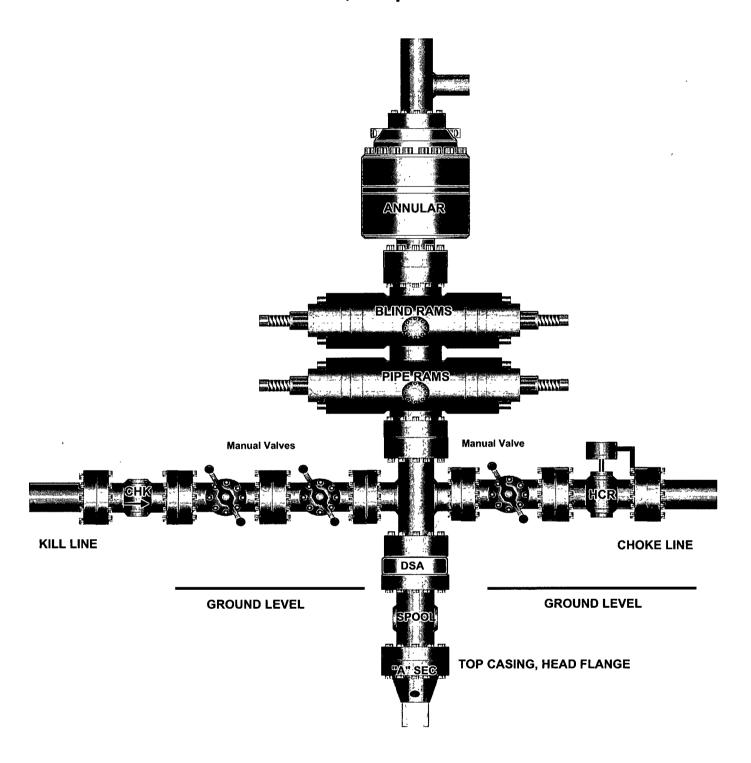
MADRON SURVEYING, INC. (5/5) 887-5836 CARLSBAD, NEW MEXICO

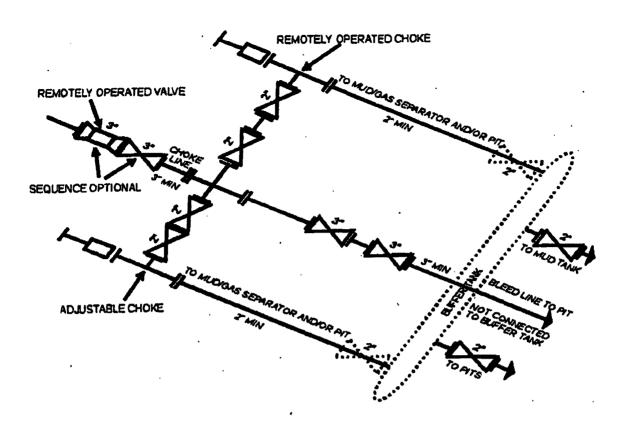


## Conventional Rig Location Layout



### 13-5/8" x 5,000 psi BOP Stack





5M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY

Although not required for any of the choke manifold systems, buffer tanks are sometimes installed downstream of the choke assemblies for the purpose of manifolding the bleed lines together. When buffer tanks are employed, valves shall be installed upstream to isolate a failure or malfunction without interrupting flow control. Though not shown on 2M, 3M, 10M, OR 15M drawings, it would also be applicable to those situations.

[54 FR 39528, Sept. 27, 1989]



TVD 8373.18 Project: Lea Co., New Mexico (Nad 83) Site. Thistle Unit 33 Fed #17H Well. Thistle Unit 33 Fed #17H Wellbore: Lateral #1 Design, Design #1



| Γ | SECTION DETAILS    |                                  |                              |                               |                                   |                                 |                                  |                               |                                 |                                |                     |
|---|--------------------|----------------------------------|------------------------------|-------------------------------|-----------------------------------|---------------------------------|----------------------------------|-------------------------------|---------------------------------|--------------------------------|---------------------|
| ſ | Sec<br>1<br>2<br>3 | MD<br>0.00<br>8373.18<br>9282.49 | inc<br>0.00<br>0.00<br>90.93 | Azi<br>0.00<br>0.00<br>348.42 | TVD<br>0.00<br>8373.18<br>8946.07 | +N/-S<br>0.00<br>0.00<br>570 42 | +E/-W<br>0.00<br>0.00<br>-116.83 | DLeg<br>0.00<br>0.00<br>10.00 | TFace<br>0.00<br>0.00<br>348.42 | VSec<br>0.00<br>0.00<br>582.26 | Target              |
| ı | 4                  | 13784.20                         | 90.93                        | 348.42                        | 8873.00                           | 4980 00                         | -1020.00                         | 0.00                          | 0.00                            | 5083.38                        | PBHL-TD (TU33F#17H) |

| ANNOTATIONS        |  |  |  |  |  |
|--------------------|--|--|--|--|--|
| MD                 | Armotation   |  |  |  |  |
| 8373.18<br>9282.49 | KOP - Build 10*/100*<br>FOC - Hotel 190 93* 69 A:348 42* |  |  |  |  |

#### PROJECT DETAILS: Lea Co., New Mexico (Nad 83)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsort: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

| WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LATILONG) |         |         |          |           |           |                 |                   |       |
|---|---------|---------|----------|-----------|-----------|-----------------|-------------------|-------|
| Name  | TVD     | +N/-S   | +E/-W    | Northing  | Easting   | Latitude        | Longstude         | Shape |
| PBHL - TD (TU33F#17H)                                   | 8873.00 | 4980.00 | -1020.00 | 462406.96 | 775135.25 | 32° 16' 8.279 N | 103° 34' 36.880 W | Point |

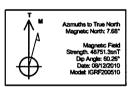
WELL DETAILS. Thesis Unit 33 Fed #17H

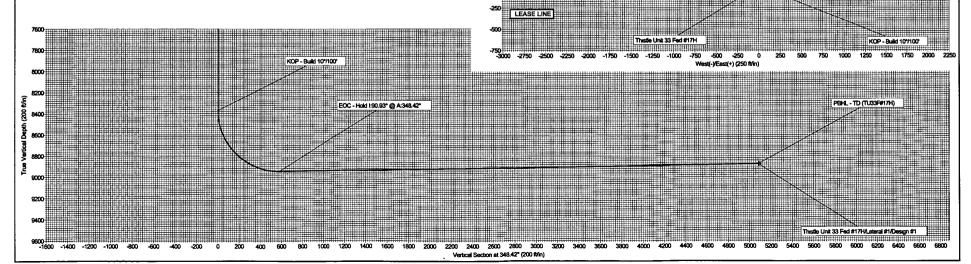
Ground Level: 3589.00

WELL @ 3604.00f (Ongnet Well Elev)

+NV-S +E/-W Northing Easing Latibude Longitude Slot 0.00 0.00 457434.32 776190.47 32\*15\*19.000 N 103\*34\*25.000 W

| L | Plan. Design #1 (Thisfie Unit 33 Fed #17H/Lateral #1) |              |       |                       |  |  |  |  |  |  |
|---|---|--------------|-------|-----------------------|--|--|--|--|--|--|
| Γ | Created By:   | Mike Starkey | Date: | 11:54, August 12:2010 |  |  |  |  |  |  |
| ı | Checked:  |              | Date: |                       |  |  |  |  |  |  |
| ı | Reviewed  |              | Date: |                       |  |  |  |  |  |  |
| ı | Approved:   |              | Date: | <del></del>           |  |  |  |  |  |  |





PBHL - TD (TU33F#17H)

LEASE LINE

4000

3000

2500

1750

1500

1250

Thistile Unit 33 Fed #17H/Lateral #1/Design #1

EOC - Hold 190.93" @ A:348.42"