

Form 3160-3  
(June 2015)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0137  
Expires: January 31, 2018

1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No.
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator <b>[260297]</b>		8. Lease Name and Well No. <b>[328173]</b>
3a. Address	3b. Phone No. (include area code)	9. API Well No. <b>30-025-48721</b>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		10. Field and Pool, or Exploratory <b>[98158]</b>
14. Distance in miles and direction from nearest town or post office*		11. Sec., T. R. M. or Blk. and Survey or Area
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)		12. County or Parish
16. No of acres in lease		13. State
17. Spacing Unit dedicated to this well		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.		
19. Proposed Depth		
20. BLM/BIA Bond No. in file		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)		
22. Approximate date work will start*		
23. Estimated duration		
24. Attachments		
The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)		
1. Well plat certified by a registered surveyor.		4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
2. A Drilling Plan.		5. Operator certification.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).		6. Such other site specific information and/or plans as may be requested by the BLM.
25. Signature	Name (Printed/Typed)	Date
Title		
Approved by (Signature)	Name (Printed/Typed)	Date
Title		
Office		
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		
Conditions of approval, if any, are attached.		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.		

GCP Rec 04/15/2021

SL

(Continued on page 2)

APPROVED WITH CONDITIONS

Approval Date: 04/12/2021

KZ  
04/26/2021

\*(Instructions on page 2)

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	<b>BTA Oil Producers LLC</b>
<b>LEASE NO.:</b>	<b>NMNM014492</b>
<b>WELL NAME &amp; NO.:</b>	<b>MESA 8105 11 Federal 75H</b>
<b>SURFACE HOLE FOOTAGE:</b>	<b>490'/N &amp; 1760'/E</b>
<b>BOTTOM HOLE FOOTAGE:</b>	<b>50'/S &amp; 990'/E</b>
<b>LOCATION:</b>	<b>Section 11, T.26 S., R.32 E., NMP</b>
<b>COUNTY:</b>	<b>Lea County, New Mexico</b>

COA

H2S	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input type="radio"/> Low	<input checked="" type="radio"/> Medium	<input type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input type="checkbox"/> Fluid Filled	<input type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input type="checkbox"/> Unit

### A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

### B. CASING

#### Casing Design:

1. The **10-3/4** inch surface casing shall be set at approximately **795 feet** (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after

- completing the cement job.
- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The **7-5/8** inch intermediate casing shall be set at approximately **12,105** feet. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

**Option 1 (Single Stage):**

- Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**  
**Excess cement calculates to -41%, additional cement might be required.**

**Option 2:**

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.  
**Excess cement calculates to -5%, additional cement might be required.**
  - b. Second stage above DV tool:
    - Cement to surface. If cement does not circulate, contact the appropriate BLM office.  
**Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**
    - ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
3. The minimum required fill of cement behind the **5 1/2 X 5 inch** production casing is:

- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

### C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).<sup>7</sup>
2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
  - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

## GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

☒ Chaves and Roosevelt Counties  
 Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.  
 During office hours call (575) 627-0272.  
 After office hours call (575)

☒ Eddy County  
 Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,



(575) 361-2822

☒ Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)  
393-3612

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be

onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
  - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.
  - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to

Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

#### C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

#### D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**OTA11042020**



U.S. Department of the Interior  
BUREAU OF LAND MANAGEMENT

# Application Data Report

04/14/2021

APD ID: 10400058336

Submission Date: 06/23/2020

Highlighted data  
reflects the most  
recent changes

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 11 FEDERAL

Well Number: 75H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

## Section 1 - General

APD ID: 10400058336

Tie to previous NOS?

Submission Date: 06/23/2020

BLM Office: CARLSBAD

User: Sammy Hajar

Title: Regulatory Analyst

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM014492

Lease Acres:

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? Y

Permitting Agent? NO

APD Operator: BTA OIL PRODUCERS LLC

Operator letter of designation:

## Operator Info

Operator Organization Name: BTA OIL PRODUCERS LLC

Operator Address: 104 S. Pecos

Zip: 79701

Operator PO Box:

Operator City: Midland

State: TX

Operator Phone: (432)682-3753

Operator Internet Address:

## Section 2 - Well Information

Well in Master Development Plan? NO

Master Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: MESA 8105 11 FEDERAL

Well Number: 75H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: WC-025

Pool Name: MIDDLE  
WOLFCAMP

Is the proposed well in an area containing other mineral resources? NONE

**Operator Name:** BTA OIL PRODUCERS LLC**Well Name:** MESA 8105 11 FEDERAL**Well Number:** 75H**Is the proposed well in an area containing other mineral resources?** NONE**Is the proposed well in a Helium production area?** N**Use Existing Well Pad?** N**New surface disturbance?****Type of Well Pad:** MULTIPLE WELL**Multiple Well Pad Name:** MESA 8105 11 FEDERAL**Number:** 74H, 75H, 76H, and 77H**Well Class:** HORIZONTAL**Number of Legs:** 1**Well Work Type:** Drill**Well Type:** OIL WELL**Describe Well Type:****Well sub-Type:** INFILL**Describe sub-type:****Distance to town:****Distance to nearest well:** 463 FT**Distance to lease line:** 490 FT**Reservoir well spacing assigned acres Measurement:** 160 Acres**Well plat:** Signed\_Mesa\_8105\_11\_Federal\_75H\_C102\_20200623085025.pdf**Well work start Date:** 11/21/2021**Duration:** 30 DAYS**Section 3 - Well Location Table****Survey Type:** RECTANGULAR**Describe Survey Type:****Datum:** NAD83**Vertical Datum:** NGVD29**Survey number:****Reference Datum:** GROUND LEVEL

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
SHL Leg #1	490	FNL	1760	FEL	26S	32E	11	Aliquot NWNE	32.063663	-103.642661	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 014492	3251	0	0	Y
KOP Leg #1	100	FNL	990	FEL	26S	32E	11	Aliquot NENE	32.064734	-103.640176	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 014492	-8867	12180	12118	Y
PPP Leg #1-1	100	FNL	990	FEL	26S	32E	11	Aliquot NENE	32.064734	-103.640176	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 014492	-8750	12063	12001	Y

**Operator Name:** BTA OIL PRODUCERS LLC**Well Name:** MESA 8105 11 FEDERAL**Well Number:** 75H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
EXIT Leg #1	100	FSL	990	FEL	26S	32E	11	Aliquot SESE	32.05058	- 103.6401 94	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 014492	- 934 5	174 48	125 96	Y
BHL Leg #1	50	FSL	990	FEL	26S	32E	11	Aliquot SESE	32.05044 3	- 103.6401 94	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 014492	- 934 5	177 28	125 96	Y





ContiTech

CONTITECH RUBBER Industrial Kft.	No:QC-DB- 599/ 2014 Page: 16 / 176
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Rig 94

ASSET 24455

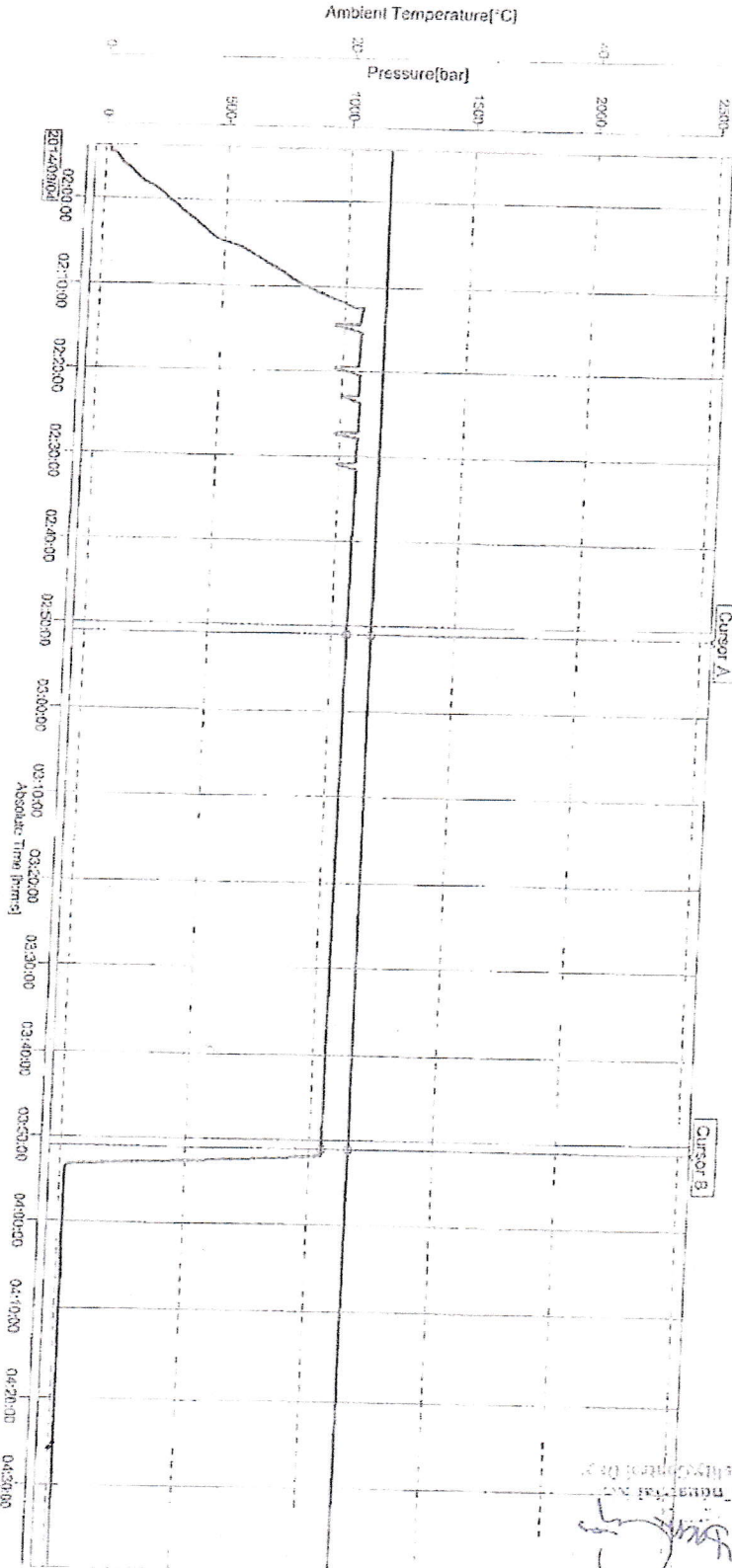
QUALITY CONTROL INSPECTION AND TEST CERTIFICATE				CERT. N°: 1592	
PURCHASER: ContiTech Oil & Marine Corp.				P.O. N°: 4500461753	
CONTITECH ORDER N°: 539225		HOSE TYPE: 3" ID Choke & Kill Hose			
HOSE SERIAL N°: 68547		NOMINAL / ACTUAL LENGTH: 7,62 m / 7,66 m			
W.P. 68,9 MPa 10000 psi		T.P. 103,4 MPa 15000 psi		Duration: 60 min.	
Pressure test with water at ambient temperature					
See attachment. ( 1 page )					
→ 10 Min.					
↑ 50 MPa					
COUPLINGS Type		Serial N°		Quality	
3" coupling with		2574 5533		AISI 4130	
4 1/16" 10K API Swivel Flange end				AISI 4130	
Hub				AISI 4130	
				A1582N H8672	
				58855	
				A1199N A1423N	
Not Designed For Well Testing				API Spec 16 C	
Fire Rated				Temperature rate:"B"	
All metal parts are flawless					
WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER INSPECTED AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.					
STATEMENT OF CONFORMITY: We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevant acceptance criteria and design requirements.					
Date:		Inspector		Quality Control	
04. September 2014.				ContiTech Rubber Industrial Kft. Quality Control Dept. <i>[Signature]</i>	

ContiTech Rubber Industrial Kft. | Budapesti út 10. 11 6/28 Szeged | H-6701 P.O.Box 152 Szeged, Hungary  
 Phone: +36 62 566 737 | Fax: +36 62 566 738 | e-mail: info@bud.contitech.hu | Internet: www.contitech-rubber.hu, www.contitech.hu  
 The Court of Szeged County as Registry Court | Registry Court No. Cg 06 09 002572 | EU VAT No. HU11067206  
 Bank: Erste Commercial Zrt., Budapest | 14220100-26831003

File Name : 000220\_68543\_68545-547.GEV.....000236\_68543\_68545-547.GEV  
File Message : 68543\_68545\_58547  
Device Type : GX10  
Serial No. : S3F606399  
Data Count : 9046  
Print Group :  
Print Range :  
Comment :  
Press-Temp :  
2014/09/04 01:53:54.000 - 2014/09/04 04:39:39.000

Sampling Int. : 1.000 sec  
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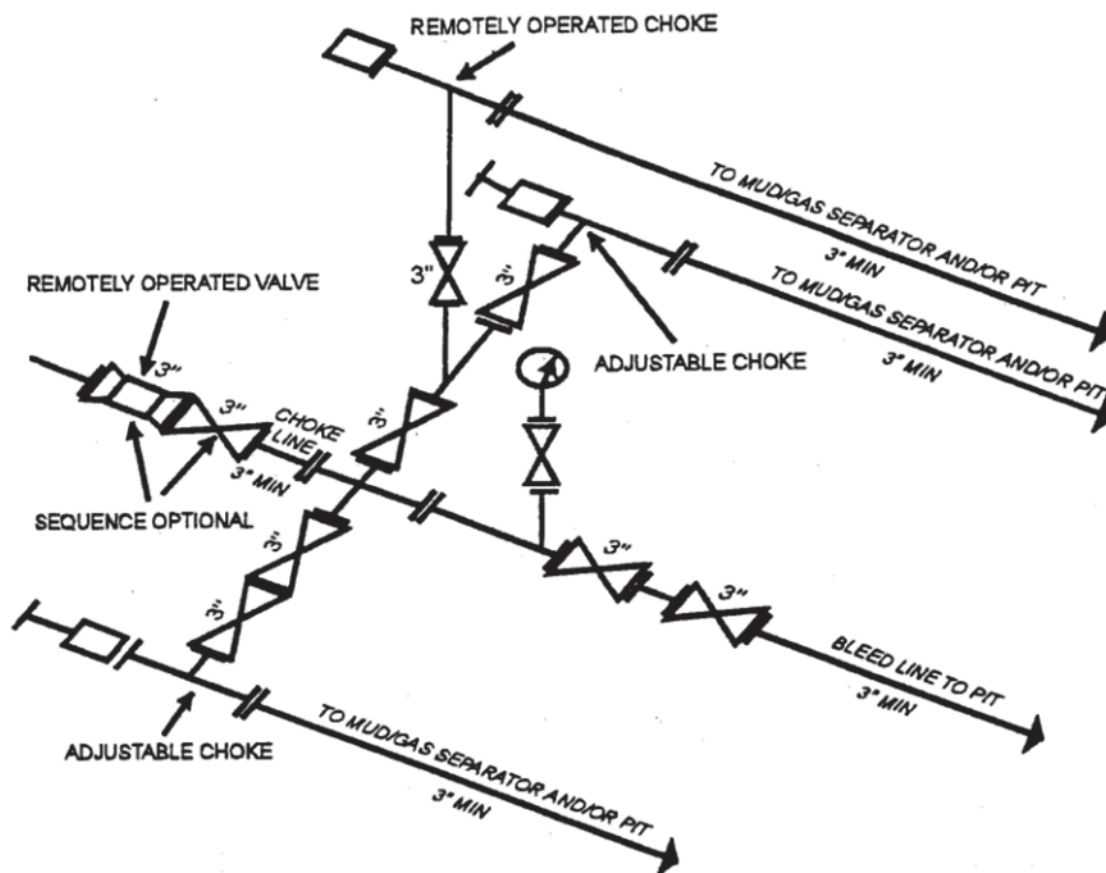
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Ambient Temperature[°C]	23.24	23.14	-0.10



10mm/div

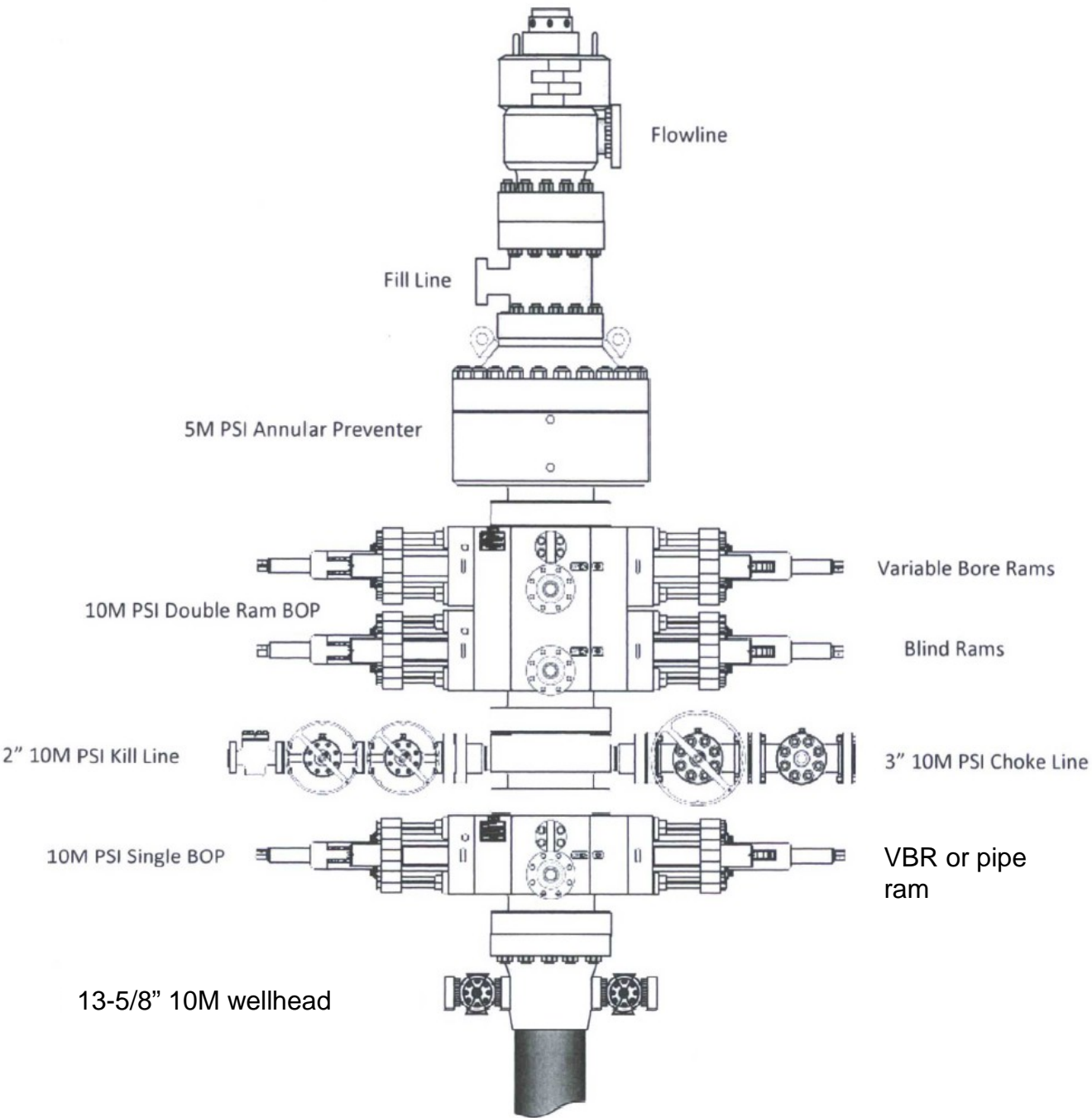
Page: 1 / 1

ATTACHMENT OF QUALITY CONTROL INSPECTION AND TEST CERTIFICATE No: 1588, 1590, 1592



10M AND 15M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY  
 [53 FR 49661, Dec. 9, 1988 and 54 FR 39528, Sept. 27, 1989]

13-5/8" 10M PSI BOP Stack



## Well control plan for 10M BOPE with 5M annular

Drilling

1. Sound alarm (alert crew).
2. Space out drill string.
3. Shut down pumps (stop pumps and rotary).
4. Shut-in Well with annular with HCR and choke in closed position.
5. Confirm shut-in.
6. Notify tool pusher/company representative.
7. Read and record the following:
  - a. SIDPP & SICP
  - b. Time of shut in
  - c. Pit gain
8. Regroup and identify forward plan. If pressure has increased to 2500 psi, confirm spacing and close the upper variable bore rams.
9. Prepare for well kill operation.

Tripping

1. Sound alarm (alert rig crew)
2. Stab full opening safety valve and close valve
3. Space out drill string
4. Shut in the well with the annular with HCR and choke in closed position
5. Confirm shut in
6. Notify tool pusher/company representative
7. Read and record the following
  - a. Time of shut in
  - b. SIDPP and SICP
  - c. Pit gain
8. If pressure has increased to 2500 psi, confirm spacing and close the upper most variable bore ram.
9. Prepare for well kill operation.

While Running Casing

1. Sound alarm (alert rig crew)
2. Stab crossover and full opening safety valve and close valve
3. Space out casing string
4. Shut in well with annular with HCR and choke in closed position
5. Confirm shut in
6. Notify tool pusher/company representative
7. Read and record the following:
  - a. SIDPP & SICP
  - b. Pit gain
  - c. Time
8. If pressure has increased to 2500 psi, confirm spacing and close the upper most variable bore ram.
9. Prepare for well kill operation.

No Pipe In Hole (Open Hole)

1. Sound alarm (alert rig crew)



## Well control plan for 10M BOPE with 5M annular

2. Shut in blind rams with HCR and choke in closed position
3. Confirm shut in
4. Notify tool pusher/company representative
5. Read and record the following:
  - a. SICP
  - b. Pit gain
  - c. Time
6. Prepare for well kill operation

Pulling BHA thru Stack

1. Prior to pulling last joint of drill pipe thru the stack
  - a. Perform flow check, if flowing:
    - a.i. Sound Alarm (alert crew)
    - a.ii. Stab full opening safety valve and close valve
    - a.iii. Space out drill string
    - a.iv. Shut in using upper most VBR, choke and HCR in closed position
    - a.v. Confirm shut in
    - a.vi. Notify tool pusher/company representative.
    - a.vii. Read and record the following:
      - a.vii.1. SIDPP and SICP
      - a.vii.2. Pit gain
      - a.vii.3. Time
    - a.viii. Prepare for well kill operation
  2. With BHA in the stack:
    - a. If possible pull BHA clear of stack
      - a.i. Follow 'open hole' procedure above
    - b. If unable to pull BHA clear of stack
      - b.i. Stab crossover with full opening safety valve, close valve.
      - b.ii. Space out
      - b.iii. Shut in using upper most VBR. HCR and choke in closed position.
      - b.iv. Confirm shut in
      - b.v. Notify tool pusher/company rep
      - b.vi. Read and record the following:
        - b.vi.1. SIDPP and SICP
        - b.vi.2. Pit gain
        - b.vi.3. Time
      - b.vii. Prepare for well kill operation

## **Drilling component and preventer compatibility table** **for 10M approval**

The following table outlines the drilling and production liner components for Wolfcamp targets requiring 10M BOPE approval. Variance is requested to utilize a 5M annular preventer in 6-1/8" hole as all components can be covered using 10M rated VBR's (variable bore rams). 5M annular on the 10M system will be tested to 100% of rated working pressure.

<b>6-1/8" hole section – 10M BOPE requirement (13-5/8" BOP)</b>			
<b>Component</b>	<b>OD</b>	<b>Preventer</b>	<b>RWP</b>
Drill pipe	4"	3.5"-5.5" VBR	10M
HWDP	4"	3.5"-5.5" VBR	10M
Jars	5"	3.5"-5.5" VBR	10M
DC's and NMDC's	4-3/4"	3.5"-5.5" VBR	10M
Mud motor	5"	3.5"-5.5" VBR	10M
Casing	4-1/2"	3.5"-5.5" VBR	10M
Open hole	NA	Blind rams	10M

<b>12-1/4" &amp; 8-3/4" hole sections – 5M BOPE requirement (13-5/8" BOP)</b>			
<b>Component</b>	<b>OD</b>	<b>Preventer</b>	<b>RWP</b>
Drill pipe	5"	3.5"-5.5" VBR or 5" pipe rams	10M
HWDP	5"	3.5"-5.5" VBR or 5" pipe rams	10M
Jars	6-1/4"	Annular	5M
DC's and NMDC's	7"-8"	Annular	5M
Mud motor	7"-8"	Annular	5M
Casing	9-5/8" & 7"	Annular	5M
Open hole	NA	Blind rams	10M



## DIMENSIONS AND

Size O.D. In.	Grade	Wt. Per Ft. With Cplg. Lb.	Inside Dia. In.	Thread & Cplg.		Extreme Line		Collapse Resistance PSI
				Drift Dia. In.	O.D. of Cplg. In.	Drift Dia. In.	O.D. of Box In.	
5	C-75*	20.30	4.184	—	—	4.059	5.094	11,240
	C-75*	23.20	4.044	—	—	3.919	5.094†	12,970
	HCL-80+	15.00	4.408	4.283	—	—	—	9,390
	HCL-80+	18.00	4.276	4.151	—	—	—	11,880
	HCL-80+	23.20	4.044	3.919	—	—	—	15,820
	HCN-80+	15.00	4.408	4.283	—	—	—	9,380
	HCN-80+	18.00	4.276	4.151	—	—	—	11,680
	HCN-80+	23.20	4.044	3.919	—	—	—	15,820
	L-80	15.00	4.408	4.283	—	—	—	7,250
	L-80	24.10	4.000	3.875	—	—	—	14,400
	L-80	18.00	4.276	4.151	—	—	—	10,500
	L-80	21.40	4.126	4.001	—	—	—	12,760
	L-80	23.20	4.044	3.919	—	—	—	13,830
	N-80	15.00	4.408	4.283	5.563	4.151	5.360	7,250
	N-80	18.00	4.276	4.151	5.563	4.151	5.360	10,490
	N-80	20.30	4.184	—	—	4.059	5.250	11,990
	N-80	23.20	4.044	—	—	3.919	5.094†	13,830
	N-80	21.40	4.126	4.001	—	—	—	12,760
	N-80	24.10	4.000	3.875	—	—	—	14,400
	C-90	15.00	4.408	4.233	—	—	—	7,840
	C-90	18.00	4.276	4.151	—	—	—	11,530
	C-90	21.40	4.126	4.001	—	—	—	14,360
	C-90	23.20	4.044	3.919	—	—	—	15,560
	C-90	24.10	4.000	3.875	—	—	—	16,200
	C-95	15.00	4.408	4.283	5.563	4.151	5.360	8,090
	C-95	18.00	4.276	4.151	5.563	4.151	5.360	12,010
	C-95	20.30	4.184	—	—	4.059	5.250	14,250
	C-95	23.20	4.044	—	—	3.919	5.094†	16,430
	C-95	21.40	4.126	4.001	—	—	—	15,160
	C-95	24.10	4.000	3.875	—	—	—	17,100
	S-95+	15.00	4.408	4.283	—	—	—	9,380
	S-95+	18.00	4.276	4.151	—	—	—	12,030
	S-95+	23.20	4.044	3.919	—	—	—	16,430
	T-95	15.00	4.408	4.283	—	—	—	8,110
	T-95	18.00	4.276	4.151	—	—	—	12,030
	T-95	21.40	4.126	4.001	—	—	—	15,160
	T-95	23.20	4.044	3.919	—	—	—	16,430
	T-95	24.10	4.000	3.875	—	—	—	17,100
	P-110	15.00	4.408	4.283	5.563	4.151	5.360	8,830
	P-110	18.00	4.276	4.151	5.563	4.151	5.360	13,450
	P-110	20.30	4.184	—	—	4.059	5.094†	16,490

NO. 203

## STRENGTHS OF CASING

STRENGTHS OF CASING									
Plain End or Ext. Line	Internal Yield Pressure PSI**			Body Yield Stgth. 1,000 Lbs.	Joint Strength - 1000 Lbs.**				
	Round Thread		Buttress Thd.		Threaded & Cplg. Joint			Ext. Line Joint	
	Short	Long			Round Thread		Buttress Thd.		
					Short	Long			
10,710	—	—	—	—	369†	—	—	529††	
12,550	—	—	—	—	369†	—	—	529††	
8,290	—	8,290	8,290	—	—	311	408	—	
10,140	—	10,140	9,910	422	—	396	492	—	
13,380	—	10,810	9,910	543	—	540	516	—	
8,290	—	8,290	8,290	350	—	311	408	—	
10,140	—	10,140	9,910	422	—	396	492	—	
13,380	—	10,810	9,910	543	—	540	516	—	
8,290	—	8,290	8,290	350	—	295	379	—	
14,000	—	10,810	9,910	566	—	538	510	—	
10,140	—	10,140	9,910	422	—	377	457	—	
12,240	—	10,810	9,910	501	—	466	510	—	
13,380	—	10,810	9,910	543	—	513	510	—	
8,290	—	8,290	8,290	350	—	311	396	437	
10,140	—	10,140	9,910	422	—	396	477	469	
11,420	—	—	—	—	388†	284††	363†	556††	
13,380	—	—	—	—	388†	284††	363†	556††	
12,240	—	10,810	9,910	501	—	490	537	—	
14,000	—	10,810	9,910	566	—	558	537	—	
9,320	—	9,320	9,320	394	—	311	404	—	
11,400	—	11,400	11,150	475	—	396	484	—	
13,770	—	12,170	11,150	564	—	490	537	—	
15,060	—	12,170	11,150	611	—	540	537	—	
15,750	—	12,170	11,150	636	—	567	537	—	
9,840	—	9,840	9,840	416	—	326	424	459	
12,040	—	12,040	11,770	501	—	416	512	493	
13,560	—	—	—	—	—	—	—	584††	
15,890	—	—	—	—	—	—	—	584††	
14,530	—	12,840	11,770	595	—	515	563	—	
16,630	—	12,840	11,770	672	—	595	563	—	
9,840	—	9,840	9,840	416	—	342	441	—	
12,040	—	12,040	11,770	501	—	436	532	—	
15,890	—	12,840	11,770	645	—	594	590	—	
9,840	—	9,840	9,840	416	—	326	424	—	
12,040	—	12,040	11,770	501	—	416	512	—	
14,530	—	12,840	11,770	595	—	515	563	—	
15,890	—	12,840	11,770	645	—	587	563	—	
16,630	—	12,840	11,770	672	—	595	563	—	
11,400	—	11,400	11,400	481	—	388	503	547	
13,940	—	13,940	13,620	580	—	495	606	587	
15,710	—	—	—	—	—	—	—	—	

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TABLE

DIMENSIONS AND

Size O.D. In.	Grade	Wt. Per Ft. With Cpigs. Lb.	Inside Dia. In.	Thread & Cpg.		Extreme Line		Col/psk Resistance PSI
				Drift Dia. In.	O.D. of Cpigs. In.	Drift Dia. In.	O.D. of Box In.	
7 7/8	S-95	45.30	6.435	6.310	—	—	—	13,690
	S-95+	26.40	6.969	6.844	—	—	—	4,850
	S-95+	29.70	6.875	6.750	—	—	—	7,150
	S-95+	33.70	6.765	6.640	—	—	—	8,800
	S-95+	39.00	6.625	6.500	—	—	—	10,600
	T-95	26.40	6.969	6.844	—	—	—	3,710
	T-95	29.70	6.875	6.750	—	—	—	5,140
	T-95	33.70	6.765	6.640	—	—	—	7,280
	T-95	39.00	6.625	6.500	—	—	—	10,000
	T-95	42.80	6.501	6.376	—	—	—	12,410
	T-95	46.30	6.435	6.310	—	—	—	13,660
	T-95	47.10	6.375	6.250	—	—	—	14,300
	T-95	51.20	6.251	6.126	—	—	—	15,580
	T-95	55.30	6.125	6.000	—	—	—	16,850
	HCP-110+	26.40	6.969	6.844	—	—	—	4,850
	HCP-110	29.70	6.875	6.750	—	—	—	7,150
	HCP-110	33.70	6.765	6.640	—	—	—	8,800
	HCP-110	39.00	6.625	6.500	8.500	8.75	8.010	5,340
	HCP-110	42.80	6.501	6.376	8.500	8.64	8.010	7,850
	P-110	39.00	6.625	6.500	8.500	8.5	—	11,090
	P-110	42.80	6.501	6.376	—	—	—	13,920
	P-110	46.30	6.435	6.310	—	—	—	15,430
	P-110	47.10	6.375	6.250	—	—	—	16,550
	HCG-125+	33.70	6.765	6.640	—	—	—	8,800
Q-125	45.30	6.435	6.310	—	—	—	17,090	
Q-125+	33.70	6.765	6.640	—	—	—	8,350	
Q-125	39.00	6.625	6.500	—	—	—	12,060	
Q-125	42.80	6.501	6.376	—	—	—	15,360	
Q-125	47.10	6.375	6.250	—	—	—	16,700	
LS-140+	33.70	6.765	6.640	—	—	—	8,690	
LS-140+	39.00	6.625	6.500	—	—	—	12,930	
V-150	33.70	6.765	6.640	8.500	—	—	8,860	
V-150	39.00	6.625	6.500	8.500	—	—	13,450	
V-150	45.30	6.435	6.310	8.500	—	—	19,680	
7 1/2	HCL-80+	46.10	6.560	6.435	—	—	—	13,320
	L-80	46.10	6.560	6.435	—	—	—	11,340
	C-90	46.10	6.560	6.435	—	—	—	12,740
	H2S-90	46.10	6.560	6.435	—	—	—	12,740
	C-95	46.10	6.560	6.435	—	—	—	13,320
	H2S-95	46.10	6.560	6.435	—	—	—	13,320
	S-95+	46.10	6.560	6.435	—	—	—	13,320
	T-95	46.10	6.560	6.435	—	—	—	13,320
	P-110	46.10	6.560	6.435	—	—	—	14,990
	Q-125	46.10	6.560	6.435	—	—	—	16,580
LS-140+	46.10	6.560	6.435	—	—	—	18,090	
8 1/2	F-25*	24.00	8.097	7.972	9.625	—	—	950
	H-40	28.00	8.017	7.892	9.625	—	—	1,640
	H-40	32.00	7.921	7.796	9.625	—	—	2,210
	HCK-55+	24.00	8.097	7.972	—	—	—	1,780
HCK-55+	28.00	8.017	7.892	—	—	—	2,680	
HCK-55+	32.00	7.921	7.796	—	—	—	4,130	
HCK-55+	36.00	7.825	7.700	—	—	—	5,300	

\*Non API Standard. Shown for information only.

\*Lone Star Pipe Data

\*\* Collapse, Internal Yield and Joint Yield Strengths are minimum values with no safety factor, reproduced by permission from API Bul. 5C2, Bulletin on Performance Properties of Casing and Tubing

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NO. 203

### STRENGTHS OF CASING

Pien. End or Ext. Line	Internal Yield Pressure PSI**			Body Yield Stgth. 1,500 Lbs.	Joint Strength - 1000 Lbs.**		
	Round Thread		Butt- ress Thd.		Threaded & Cpg. Joint		Ext. Line Joint
	Short	Long			Round Thread	Butt- ress Thd.	
12,970	—	12,460	11,620	1,248	—	1,116	1,293
7,150	—	7,150	7,150	714	—	568	740
8,180	—	8,180	8,180	811	—	655	841
9,380	—	9,380	9,380	923	—	753	957
10,900	—	10,900	10,900	1,063	—	826	1,101
7,150	—	7,150	7,150	714	—	560	716
8,180	—	8,180	8,180	811	—	659	813
9,380	—	9,380	9,380	923	—	772	925
10,900	—	10,900	10,900	1,063	—	814	1,095
12,250	—	12,250	11,620	1,185	—	1,037	1,187
12,970	—	12,460	11,620	1,248	—	1,101	1,251
13,630	—	12,460	11,620	1,306	—	1,159	1,300
14,980	—	—	—	1,423	—	—	—
16,350	—	—	—	1,539	—	—	—
8,280	—	8,280	8,280	827	—	654	845
9,470	—	9,470	9,470	940	—	769	960
10,860	—	10,860	10,860	1,069	—	901	1,093
9,470	—	9,470	9,470	940	—	769	950
10,860	—	10,860	10,860	1,069	—	901	1,093
12,620	—	12,620	12,620	1,231	—	1,086	1,258
14,190	—	14,190	13,460	1,372	—	1,210	1,402
15,020	—	14,430	13,460	1,446	—	1,285	1,477
15,780	—	14,430	13,460	1,512	—	1,353	1,545
12,340	—	12,340	12,340	1,215	—	1,009	1,197
17,070	—	16,400	15,290	1,643	—	1,439	1,619
12,340	—	12,340	12,340	1,215	—	1,009	1,197
14,340	—	14,340	14,340	1,369	—	1,194	1,379
16,120	—	16,120	15,290	1,559	—	1,355	1,536
17,930	—	16,400	15,290	1,718	—	1,515	1,672
13,820	—	13,820	13,820	1,361	—	1,128	1,334
16,070	—	16,070	16,070	1,567	—	1,335	1,536
—	—	14,800	14,800	1,456	—	1,207	1,482
—	—	17,210	17,210	1,679	—	1,428	1,706
—	—	19,680	18,350	1,971	—	1,721	1,932
10,750	—	10,490	9,790	1,070	—	965	1,091
10,750	—	10,490	9,790	1,070	—	941	1,091
12,090	—	11,810	11,010	1,204	—	1,028	1,074
12,090	—	11,810	11,010	1,204	—	965	1,091
12,760	—	12,460	11,620	1,271	—	978	1,129
12,760	—	12,460	11,620	1,271	—	978	1,129
12,760	—	12,460	11,620	1,271	—	992	1,168
12,760	—	12,460	11,620	1,271	—	978	1,129
14,760	—	14,430	13,460	1,471	—	1,142	1,334
16,790	—	16,400	15,290	1,672	—	1,279	1,462
18,810	—	18,360	17,130	1,872	—	1,429	1,628
1,340	—	173	161	—	—	—	—
2,470	2,470	—	318	233	—	—	—
2,860	2,860	—	368	279	—	—	—
2,950	2,950	—	—	381	326	—	—
3,390	3,390	3,390	3,390	437	414	464	651
3,930	3,930	3,930	3,930	503	497	556	749
4,460	4,460	4,460	4,460	568	579	648	847

† Hydril TS      ‡ Hydril Super FJ-P  
 †† Hydril FJ-P      ‡‡ Hydril Super EU

## DIMENSIONS AND

Size O.D. In.	Grade	Wt. Per Ft. Cplg., Lb.	Inside Dia. In.	Thread & Cplg.		Extreme Line		Col/pse Resistance PSI
				Drift Dia. in.	O.D. of Cplg. In.	Drift Dia. in.	O.D. of Box In.	
5 1/2	T-95	29.70	4.376	4.251	—	—	—	17,430
	T-95	32.60	4.250	4.125	—	—	—	19,140
	T-95	35.30	4.126	4.001	—	—	—	20,760
	T-95	38.00	4.000	3.875	—	—	—	22,380
	T-95	40.50	3.876	3.751	—	—	—	23,920
	T-95	43.10	3.750	3.625	—	—	—	25,400
	HCP-110	17.00	4.892	4.767	—	—	—	8,580
	P-110	17.00	4.892	4.767	6.050	4.653	5.860	7,460
	P-110	20.00	4.778	4.653	6.050	4.653	5.860	11,080
	P-110	23.00	4.670	4.545	6.050	4.545	5.860	14,520
	P-110	26.00	4.548	—	—	4.423	5.656	17,390
	HCP-125	17.00	4.892	4.767	—	—	—	8,580
	Q-125	17.00	4.892	4.767	—	—	—	7,890
	Q-125	20.00	4.778	4.653	—	—	—	12,080
	Q-125	23.00	4.670	4.545	—	—	—	16,070
	Q-125	26.00	4.548	4.423	—	—	—	19,770
	LS-140	17.00	4.892	4.767	—	—	—	8,580
	LS-140	20.00	4.778	4.653	—	—	—	12,950
	LS-140	23.00	4.670	4.545	—	—	—	17,500
	V-150	20.00	4.778	4.653	—	—	—	13,480
	V-150	23.00	4.670	4.545	6.050	—	—	18,390
	V-150	26.00	4.548	4.423	6.050	—	—	23,720

## STRENGTHS OF CASING

Plan End or Ext. Line	Internal Yield Pressure PSI**			Body Yield Stgh. 1,000 Lbs.	Joint Strength - 1000 Lbs.**			
	Round Thread		But- tress Thd.		Threaded & Cplg. Joint			Ext. Line Joint
	Short	Long			Round Thread		But- tress Thd.	
					Short	Long		
16,990	—	—	—	828	—	—	—	—
18,810	—	—	—	909	—	—	—	—
20,770	—	—	—	987	—	—	—	—
22,670	—	—	—	1,063	—	—	—	—
24,540	—	—	—	1,136	—	—	—	—
26,450	—	—	—	1,208	—	—	—	—
10,640	—	10,640	10,640	546	—	445	568	—
10,640	—	10,640	10,640	546	—	445	568	620
12,640	—	12,640	12,360	641	—	548	667	654
14,520	—	13,580	12,360	729	—	643	724	722
16,660	—	—	—	—	569†	393††	564†	892††
12,090	—	12,090	12,090	620	—	481	620	—
12,090	—	12,090	12,090	620	—	481	620	—
14,360	—	14,360	14,050	729	—	592	728	—
16,510	—	15,430	14,050	829	—	694	782	—
18,930	—	15,430	14,050	939	—	808	782	—
13,540	—	13,540	13,540	695	—	534	690	—
16,080	—	16,080	15,740	816	—	657	810	—
18,490	—	17,290	15,740	928	—	771	869	—
17,230	—	17,230	16,860	874	—	701	865	—
—	—	17,230	16,860	874	—	701	908	—
—	—	18,520	16,860	994	—	823	910	—
—	—	22,720	—	—	—	—	—	722†
11,870	—	9,880	8,990	612	—	—	—	—



## 7.625 29.7# P-110 HC Stinger™

## Pipe Body Data

Nominal OD	7.625	Inches
Wall Thickness	0.375	Inches
Weight	29.70	Lb/ft
PE Weight	29.04	Lb/ft
Nominal ID	6.875	Inches
Drift	6.750	Inches
Minimum Yield Strength	110,000	PSI
Minimum Tensile Strength	125,000	PSI
RBW	87.5%	Rating

## Make-Up torques

Yield torque	25,960	LBS.
Max Operating Torque	23,600	LBS.
Max Make-Up	18,900	LBS.
Optimum Make-Up	17,200	LBS.
Minimum Make-Up	15,500	LBS.



## Connection Data

Connection OD	7.625	Inches
Connection ID	6.875	Inches
Make-Up loss	3.030	Inches
Tension Efficiency	60%	Rating
Compression Efficiency	60%	Rating
Yield Strength in Tension	564,000	LBS.
Yield Strength in Compression	564,000	LBS.
Minyr (Burst)	7,570	PSI
Collapse Pressure	6,150	PSI
Uniaxial Bending	-	degrees

OFSI SYNERGY  
SERVICE PACKAGE

Technical Sales Support: Rafael Escamilla Jr., Cell: 281-949-7704, [jescamilla@ofsiint.com](mailto:jescamilla@ofsiint.com)

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BTA Oil Producers, LLC  
104 S Pecos  
Midland, TX 79701

WELL: Mesa 8105 11 Federal #75H (WMAF)  
TVD: 12596  
MD: 17728

### DRILLING PLAN

#### Casing Program

Hole Size	Csg. Size	From (MD)	To (MD)	From (TVD)	To (TVD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Burst	Body Tension	Joint Tension	Dry/Buoyant	Mud Weight (ppg)
14 3/4	10 3/4	0	745	0	745	No	40.5	J-55	STC	4.9	9.7	20.8	13.9	Dry	8.3
9 7/8	7 5/8	0	8062	0	8000	yes	29.7	P110	Buttress	1.4	2.4	3.9	4.0	Dry	9.4
8 3/4	7 5/8	8062	12105	8000	12044	yes	29.7	P110	FJ	1.6	1.6	2.6	2.7	Dry	9.4
6 3/4	5 1/2	0	11905	0	11844	Yes	20	P110	Buttress	1.8	1.4	2.7	2.8	Dry	14
6 3/4	5	11905	17728	11844	12596	Yes	18	P110	Buttress	1.8	1.4	1.8	1.9	Dry	14

• 7 5/8" has DV Tool @ 4633'



BTA Oil Producers, LLC  
104 S Pecos  
Midland, TX 79701

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TVD: 12596  
MD: 17728

### DRILLING PLAN

#### Casing Program

Hole Size	Csg. Size	From (MD)	To (MD)	From (TVD)	To (TVD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Burst	Body Tension	Joint Tension	Dry/Buoyant	Mud Weight (ppg)
14 3/4	10 3/4	0	745	0	745	No	40.5	J-55	STC	4.9	9.7	20.8	13.9	Dry	8.3
9 7/8	7 5/8	0	8062	0	8000	yes	29.7	P110	Buttress	1.4	2.4	3.9	4.0	Dry	9.4
8 3/4	7 5/8	8062	12105	8000	12044	yes	29.7	P110	FJ	1.6	1.6	2.6	2.7	Dry	9.4
6 3/4	5 1/2	0	11905	0	11844	Yes	20	P110	Buttress	1.8	1.4	2.7	2.8	Dry	14
6 3/4	5	11905	17728	11844	12596	Yes	18	P110	Buttress	1.8	1.4	1.8	1.9	Dry	14

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6 3/4	5 1/2	0	11905	0	11844	Yes	20	P110	Buttress	1.8	1.4	2.7	2.8	Dry	14
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#### Casing Program

Hole Size	Csg. Size	From (MD)	To (MD)	From (TVD)	To (TVD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Burst	Body Tension	Joint Tension	Dry/Buoyant	Mud Weight (ppg)
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6 3/4	5 1/2	0	11905	0	11844	Yes	20	P110	Buttress	1.8	1.4	2.7	2.8	Dry	14
6 3/4	5	11905	17728	11844	12596	Yes	18	P110	Buttress	1.8	1.4	1.8	1.9	Dry	14

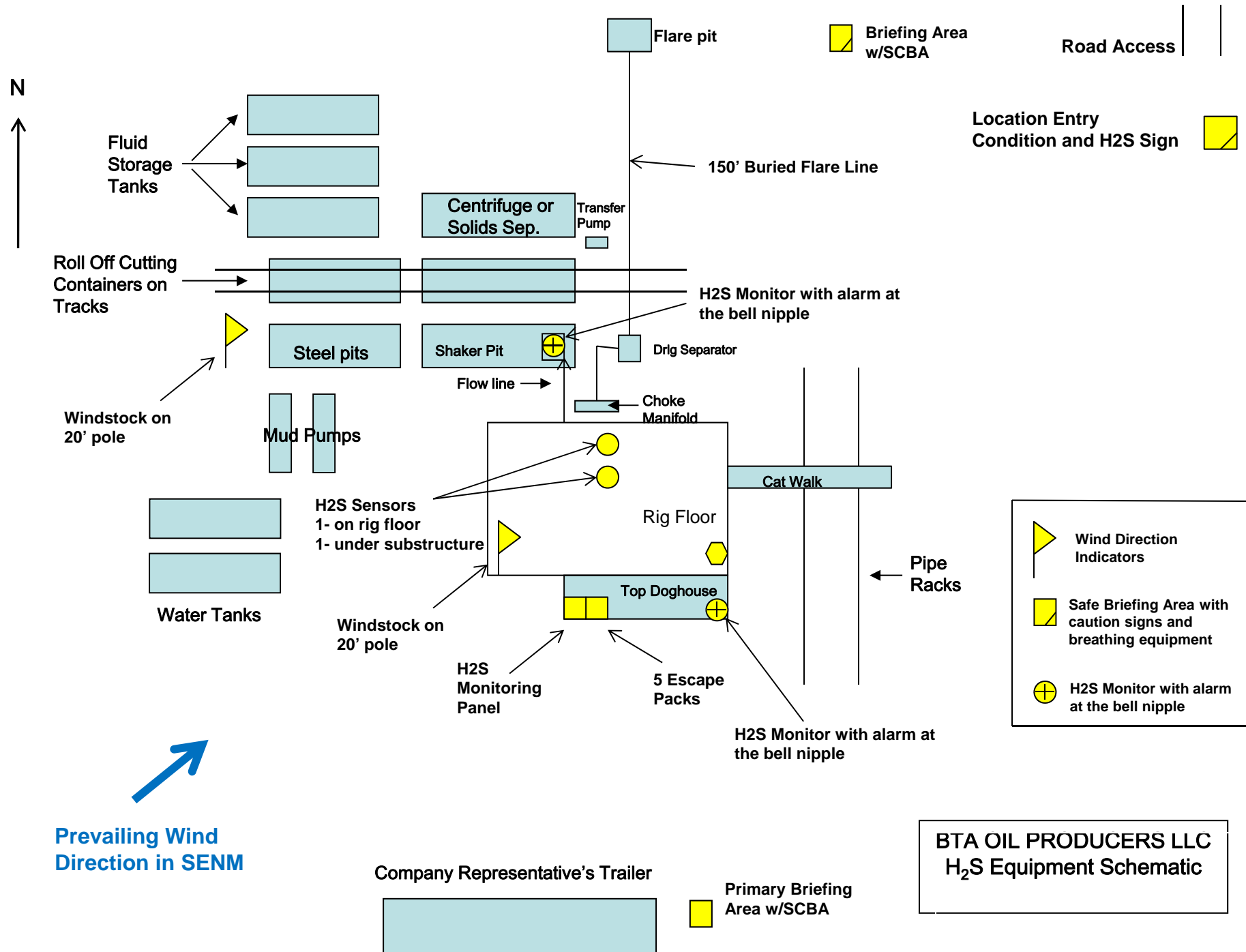
• 7 5/8" has DV Tool @ 4633'

## **EMERGENCY CALL LIST**

	<b><u>OFFICE</u></b>	<b><u>MOBILE</u></b>
BTA Oil Producers LLC OFFICE	432-682-3753	
BEN GRIMES, Operations	432-682-3753	432-559-4309
NICK EATON, Drilling	432-682-3753	432-260-7841
TRACE WOHLFAHRT, Completions	432-682-3753	

## **EMERGENCY RESPONSE NUMBERS**

	<b><u>OFFICE</u></b>
STATE POLICE	575-748-9718
EDDY COUNTY SHERIFF	575-746-2701
EMERGENCY MEDICAL SERVICES (AMBULANCE)	911 or 575-746-2701
EDDY COUNTY EMERGENCY MANAGEMENT (HARRY BURGESS)	575-887-9511
STATE EMERGENCY RESPONSE CENTER (SERC)	575-476-9620
CARLSBAD POLICE DEPARTMENT	575-885-2111
CARLSBAD FIRE DEPARTMENT	575-885-3125
NEW MEXICO OIL CONSERVATION DIVISION	575-748-1283
INDIAN FIRE & SAFETY	800-530-8693
HALLIBURTON SERVICES	800-844-8451



**BTA OIL PRODUCERS LLC****HYDROGEN SULFIDE DRILLING OPERATIONS PLAN****1. 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:

- a. The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S).
- b. The proper use and maintenance of personal protective equipment and life support systems.
- c. The proper use of H<sub>2</sub>S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- d. The proper techniques for first aid and rescue procedures.

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

- a. The effects of H<sub>2</sub>S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- b. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- c. The contents and requirements of the H<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H<sub>2</sub>S zone (within 3 days or 500 feet) and weekly H<sub>2</sub>S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

**2. H<sub>2</sub>S SAFETY EQUIPMENT AND SYSTEMS**

Note: All H<sub>2</sub>S 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 reasonably expected to contain H<sub>2</sub>S. If H<sub>2</sub>S greater than 100 ppm is encountered in the gas stream we will shut in and install H<sub>2</sub>S equipment.

- a. Well Control Equipment:
  - Flare line.
  - Choke manifold with remotely operated choke.
  - Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
  - Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.
- b. Protective equipment for essential personnel:
  - Mark II Surviveair 30-minute units located in the dog house and at briefing areas.
- c. H<sub>2</sub>S detection and monitoring equipment:

- 2 - portable H2S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 ppm are reached.
- d. Visual warning systems:  
Caution/Danger signs 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.
  - e. Mud Program:  
The mud program has been designed to minimize the volume of H2S circulated to the surface.
  - f. Metallurgy:  
All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
  - g. Communication:  
Company vehicles equipped with cellular telephone.

# **W A R N I N G**

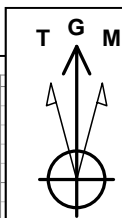
**YOU ARE ENTERING AN H<sub>2</sub>S AREA  
AUTHORIZED PERSONNEL ONLY**

- 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. CK WITH BTA OIL PRODUCERS LLC FOREMAN AT MAIN OFFICE**

**BTA OIL PRODUCERS LLC**

**1-432-682-3753**

## BTA Oil Producers, LLC



Azimuths to Grid North  
True North:  $-0.37^\circ$   
Magnetic North:  $7.40^\circ$

Magnetic Field  
Strength: 48689.4nT  
Dip Angle:  $60.08^\circ$   
Date: 12/31/2009  
Model: IGRF200510

## SITE DETAILS: Mesa Sec 11, T26S, R32E

Site Centre Northing: 387721.83  
Easting: 752135.43

Positional Uncertainty: 0.0  
Convergence: 0.36  
Local North: Grid

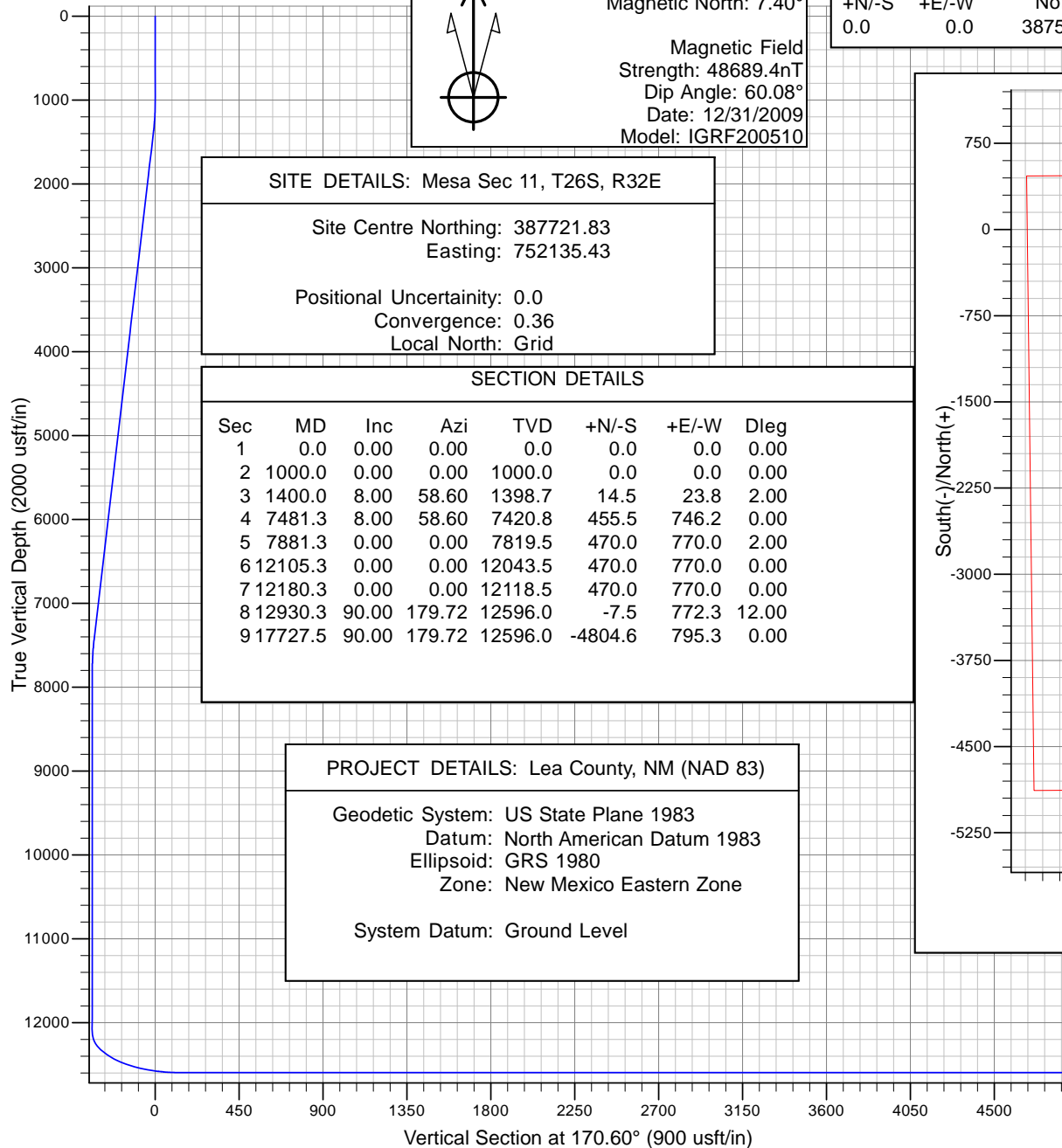
## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00
3	1400.0	8.00	58.60	1398.7	14.5	23.8	2.00
4	7481.3	8.00	58.60	7420.8	455.5	746.2	0.00
5	7881.3	0.00	0.00	7819.5	470.0	770.0	2.00
6	12105.3	0.00	0.00	12043.5	470.0	770.0	0.00
7	12180.3	0.00	0.00	12118.5	470.0	770.0	0.00
8	12930.3	90.00	179.72	12596.0	-7.5	772.3	12.00
9	17727.5	90.00	179.72	12596.0	-4804.6	795.3	0.00

## PROJECT DETAILS: Lea County, NM (NAD 83)

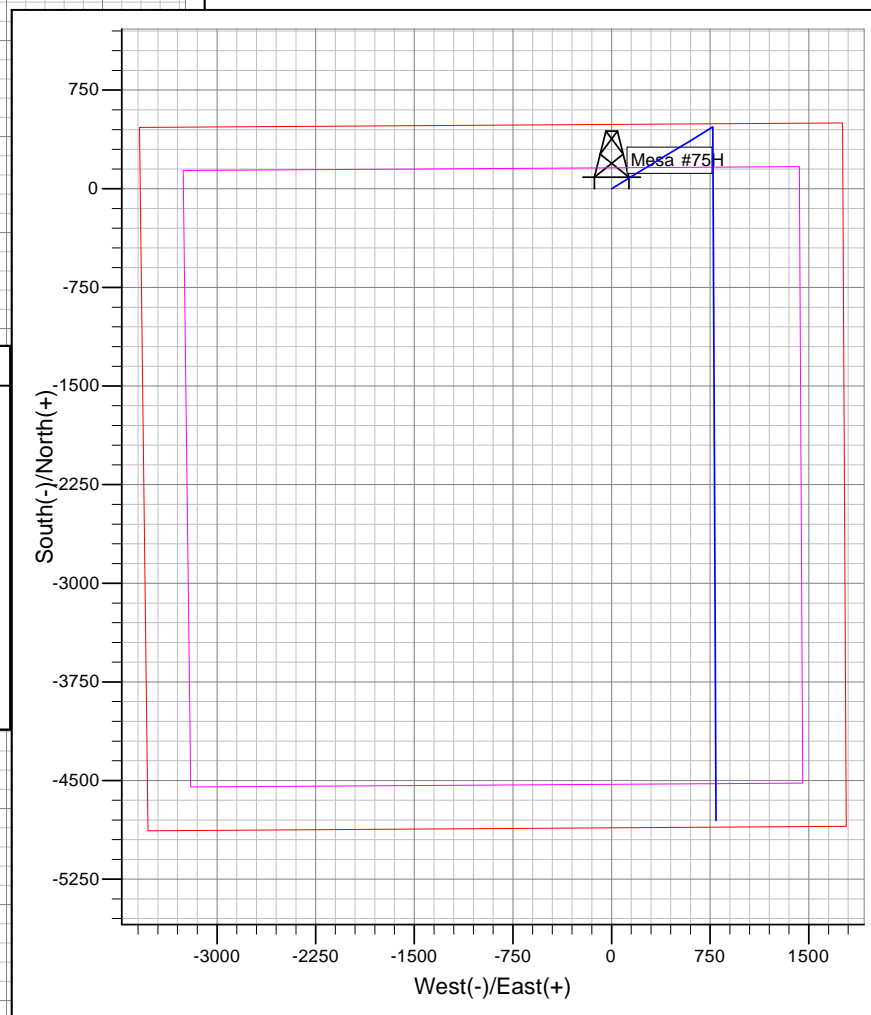
Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: New Mexico Eastern Zone

System Datum: Ground Level



## WELL DETAILS: Mesa #75H

+N/-S	+E/-W	Northing	Ground Level Easting	3251.0 Latitude	Longitude
0.0	0.0	387582.70	755291.80	32° 3' 49.186 N	103° 38' 33.581 W





# **BTA Oil Producers, LLC**

**Lea County, NM (NAD 83)**

**Mesa Sec 11, T26S, R32E**

**Mesa #75H**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report - Geographic**

**19 June, 2020**

**Microsoft**  
Planning Report - Geographic

<b>Database:</b>	Old	<b>Local Co-ordinate Reference:</b>	Well Mesa #75H
<b>Company:</b>	BTA Oil Producers, LLC	<b>TVD Reference:</b>	GL @ 3251.0usft
<b>Project:</b>	Lea County, NM (NAD 83)	<b>MD Reference:</b>	GL @ 3251.0usft
<b>Site:</b>	Mesa Sec 11, T26S, R32E	<b>North Reference:</b>	Grid
<b>Well:</b>	Mesa #75H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

<b>Project</b>	Lea County, NM (NAD 83), Lea County, NM		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Ground Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Eastern Zone		Using geodetic scale factor

<b>Site</b>	Mesa Sec 11, T26S, R32E		
<b>Site Position:</b>		<b>Northing:</b>	387,721.83 usft
<b>From:</b>	Map	<b>Easting:</b>	752,135.43 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16 "
		<b>Latitude:</b>	32° 3' 50.761 N
		<b>Longitude:</b>	103° 39' 10.249 W
		<b>Grid Convergence:</b>	0.36 °

<b>Well</b>	Mesa #75H		
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>
<b>Position Uncertainty</b>	0.0 usft		<b>Wellhead Elevation:</b>
			<b>Latitude:</b>
			<b>Longitude:</b>
			<b>Ground Level:</b>

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	12/31/2009	7.77	60.08	48,689.44306383

<b>Design</b>	Design #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	170.60

<b>Plan Survey Tool Program</b>	<b>Date</b>	6/19/2020		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.0	17,727.5 Design #1 (Wellbore #1)		

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,400.0	8.00	58.60	1,398.7	14.5	23.8	2.00	2.00	0.00	58.60	
7,481.3	8.00	58.60	7,420.8	455.5	746.2	0.00	0.00	0.00	0.00	
7,881.3	0.00	0.00	7,819.5	470.0	770.0	2.00	-2.00	0.00	180.00	
12,105.3	0.00	0.00	12,043.5	470.0	770.0	0.00	0.00	0.00	0.00	
12,180.3	0.00	0.00	12,118.5	470.0	770.0	0.00	0.00	0.00	0.00	
12,930.3	90.00	179.72	12,596.0	-7.5	772.3	12.00	12.00	0.00	179.72	
17,727.5	90.00	179.72	12,596.0	-4,804.6	795.3	0.00	0.00	0.00	0.00	Mesa #75H BHL

**Microsoft**  
Planning Report - Geographic

<b>Database:</b>	Old	<b>Local Co-ordinate Reference:</b>	Well Mesa #75H
<b>Company:</b>	BTA Oil Producers, LLC	<b>TVD Reference:</b>	GL @ 3251.0usft
<b>Project:</b>	Lea County, NM (NAD 83)	<b>MD Reference:</b>	GL @ 3251.0usft
<b>Site:</b>	Mesa Sec 11, T26S, R32E	<b>North Reference:</b>	Grid
<b>Well:</b>	Mesa #75H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	387,582.70	755,291.80	32° 3' 49.186 N	103° 38' 33.581 W
100.0	0.00	0.00	100.0	0.0	0.0	387,582.70	755,291.80	32° 3' 49.186 N	103° 38' 33.581 W
200.0	0.00	0.00	200.0	0.0	0.0	387,582.70	755,291.80	32° 3' 49.186 N	103° 38' 33.581 W
300.0	0.00	0.00	300.0	0.0	0.0	387,582.70	755,291.80	32° 3' 49.186 N	103° 38' 33.581 W
400.0	0.00	0.00	400.0	0.0	0.0	387,582.70	755,291.80	32° 3' 49.186 N	103° 38' 33.581 W
500.0	0.00	0.00	500.0	0.0	0.0	387,582.70	755,291.80	32° 3' 49.186 N	103° 38' 33.581 W
600.0	0.00	0.00	600.0	0.0	0.0	387,582.70	755,291.80	32° 3' 49.186 N	103° 38' 33.581 W
700.0	0.00	0.00	700.0	0.0	0.0	387,582.70	755,291.80	32° 3' 49.186 N	103° 38' 33.581 W
800.0	0.00	0.00	800.0	0.0	0.0	387,582.70	755,291.80	32° 3' 49.186 N	103° 38' 33.581 W
900.0	0.00	0.00	900.0	0.0	0.0	387,582.70	755,291.80	32° 3' 49.186 N	103° 38' 33.581 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	387,582.70	755,291.80	32° 3' 49.186 N	103° 38' 33.581 W
1,100.0	2.00	58.60	1,100.0	0.9	1.5	387,583.61	755,293.29	32° 3' 49.195 N	103° 38' 33.563 W
1,200.0	4.00	58.60	1,199.8	3.6	6.0	387,586.33	755,297.75	32° 3' 49.221 N	103° 38' 33.511 W
1,300.0	6.00	58.60	1,299.5	8.2	13.4	387,590.87	755,305.19	32° 3' 49.266 N	103° 38' 33.424 W
1,400.0	8.00	58.60	1,398.7	14.5	23.8	387,597.22	755,315.59	32° 3' 49.328 N	103° 38' 33.303 W
1,500.0	8.00	58.60	1,497.7	21.8	35.7	387,604.47	755,327.47	32° 3' 49.399 N	103° 38' 33.165 W
1,600.0	8.00	58.60	1,596.8	29.0	47.6	387,611.72	755,339.35	32° 3' 49.470 N	103° 38' 33.026 W
1,700.0	8.00	58.60	1,695.8	36.3	59.4	387,618.98	755,351.23	32° 3' 49.541 N	103° 38' 32.887 W
1,800.0	8.00	58.60	1,794.8	43.5	71.3	387,626.23	755,363.11	32° 3' 49.612 N	103° 38' 32.749 W
1,900.0	8.00	58.60	1,893.8	50.8	83.2	387,633.48	755,374.99	32° 3' 49.683 N	103° 38' 32.610 W
2,000.0	8.00	58.60	1,992.9	58.0	95.1	387,640.73	755,386.87	32° 3' 49.754 N	103° 38' 32.472 W
2,100.0	8.00	58.60	2,091.9	65.3	107.0	387,647.98	755,398.74	32° 3' 49.825 N	103° 38' 32.333 W
2,200.0	8.00	58.60	2,190.9	72.5	118.8	387,655.23	755,410.62	32° 3' 49.896 N	103° 38' 32.194 W
2,300.0	8.00	58.60	2,289.9	79.8	130.7	387,662.48	755,422.50	32° 3' 49.967 N	103° 38' 32.056 W
2,400.0	8.00	58.60	2,389.0	87.0	142.6	387,669.73	755,434.38	32° 3' 50.038 N	103° 38' 31.917 W
2,500.0	8.00	58.60	2,488.0	94.3	154.5	387,676.98	755,446.26	32° 3' 50.109 N	103° 38' 31.779 W
2,600.0	8.00	58.60	2,587.0	101.5	166.3	387,684.23	755,458.14	32° 3' 50.180 N	103° 38' 31.640 W
2,700.0	8.00	58.60	2,686.1	108.8	178.2	387,691.48	755,470.02	32° 3' 50.251 N	103° 38' 31.502 W
2,800.0	8.00	58.60	2,785.1	116.0	190.1	387,698.73	755,481.90	32° 3' 50.322 N	103° 38' 31.363 W
2,900.0	8.00	58.60	2,884.1	123.3	202.0	387,705.98	755,493.77	32° 3' 50.393 N	103° 38' 31.224 W
3,000.0	8.00	58.60	2,983.1	130.5	213.9	387,713.23	755,505.65	32° 3' 50.464 N	103° 38' 31.086 W
3,100.0	8.00	58.60	3,082.2	137.8	225.7	387,720.48	755,517.53	32° 3' 50.535 N	103° 38' 30.947 W
3,200.0	8.00	58.60	3,181.2	145.0	237.6	387,727.74	755,529.41	32° 3' 50.606 N	103° 38' 30.809 W
3,300.0	8.00	58.60	3,280.2	152.3	249.5	387,734.99	755,541.29	32° 3' 50.677 N	103° 38' 30.670 W
3,400.0	8.00	58.60	3,379.2	159.5	261.4	387,742.24	755,553.17	32° 3' 50.748 N	103° 38' 30.532 W
3,500.0	8.00	58.60	3,478.3	166.8	273.3	387,749.49	755,565.05	32° 3' 50.819 N	103° 38' 30.393 W
3,600.0	8.00	58.60	3,577.3	174.0	285.1	387,756.74	755,576.93	32° 3' 50.890 N	103° 38' 30.254 W
3,700.0	8.00	58.60	3,676.3	181.3	297.0	387,763.99	755,588.80	32° 3' 50.961 N	103° 38' 30.116 W
3,800.0	8.00	58.60	3,775.3	188.5	308.9	387,771.24	755,600.68	32° 3' 51.032 N	103° 38' 29.977 W
3,900.0	8.00	58.60	3,874.4	195.8	320.8	387,778.49	755,612.56	32° 3' 51.103 N	103° 38' 29.839 W
4,000.0	8.00	58.60	3,973.4	203.0	332.7	387,785.74	755,624.44	32° 3' 51.174 N	103° 38' 29.700 W
4,100.0	8.00	58.60	4,072.4	210.3	344.5	387,792.99	755,636.32	32° 3' 51.245 N	103° 38' 29.561 W
4,200.0	8.00	58.60	4,171.5	217.6	356.4	387,800.24	755,648.20	32° 3' 51.316 N	103° 38' 29.423 W
4,300.0	8.00	58.60	4,270.5	224.8	368.3	387,807.49	755,660.08	32° 3' 51.387 N	103° 38' 29.284 W
4,400.0	8.00	58.60	4,369.5	232.1	380.2	387,814.74	755,671.96	32° 3' 51.458 N	103° 38' 29.146 W
4,500.0	8.00	58.60	4,468.5	239.3	392.1	387,821.99	755,683.83	32° 3' 51.529 N	103° 38' 29.007 W
4,600.0	8.00	58.60	4,567.6	246.6	403.9	387,829.24	755,695.71	32° 3' 51.600 N	103° 38' 28.869 W
4,700.0	8.00	58.60	4,666.6	253.8	415.8	387,836.50	755,707.59	32° 3' 51.671 N	103° 38' 28.730 W
4,800.0	8.00	58.60	4,765.6	261.1	427.7	387,843.75	755,719.47	32° 3' 51.742 N	103° 38' 28.591 W
4,900.0	8.00	58.60	4,864.6	268.3	439.6	387,851.00	755,731.35	32° 3' 51.813 N	103° 38' 28.453 W
5,000.0	8.00	58.60	4,963.7	275.6	451.4	387,858.25	755,743.23	32° 3' 51.884 N	103° 38' 28.314 W
5,100.0	8.00	58.60	5,062.7	282.8	463.3	387,865.50	755,755.11	32° 3' 51.955 N	103° 38' 28.176 W
5,200.0	8.00	58.60	5,161.7	290.1	475.2	387,872.75	755,766.99	32° 3' 52.026 N	103° 38' 28.037 W
5,300.0	8.00	58.60	5,260.7	297.3	487.1	387,880.00	755,778.86	32° 3' 52.097 N	103° 38' 27.899 W
5,400.0	8.00	58.60	5,359.8	304.6	499.0	387,887.25	755,790.74	32° 3' 52.168 N	103° 38' 27.760 W

**Microsoft**  
Planning Report - Geographic

<b>Database:</b>	Old	<b>Local Co-ordinate Reference:</b>	Well Mesa #75H
<b>Company:</b>	BTA Oil Producers, LLC	<b>TVD Reference:</b>	GL @ 3251.0usft
<b>Project:</b>	Lea County, NM (NAD 83)	<b>MD Reference:</b>	GL @ 3251.0usft
<b>Site:</b>	Mesa Sec 11, T26S, R32E	<b>North Reference:</b>	Grid
<b>Well:</b>	Mesa #75H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
5,500.0	8.00	58.60	5,458.8	311.8	510.8	387,894.50	755,802.62	32° 3' 52.239 N	103° 38' 27.621 W	
5,600.0	8.00	58.60	5,557.8	319.1	522.7	387,901.75	755,814.50	32° 3' 52.310 N	103° 38' 27.483 W	
5,700.0	8.00	58.60	5,656.9	326.3	534.6	387,909.00	755,826.38	32° 3' 52.381 N	103° 38' 27.344 W	
5,800.0	8.00	58.60	5,755.9	333.6	546.5	387,916.25	755,838.26	32° 3' 52.452 N	103° 38' 27.206 W	
5,900.0	8.00	58.60	5,854.9	340.8	558.4	387,923.50	755,850.14	32° 3' 52.523 N	103° 38' 27.067 W	
6,000.0	8.00	58.60	5,953.9	348.1	570.2	387,930.75	755,862.02	32° 3' 52.594 N	103° 38' 26.928 W	
6,100.0	8.00	58.60	6,053.0	355.3	582.1	387,938.00	755,873.89	32° 3' 52.665 N	103° 38' 26.790 W	
6,200.0	8.00	58.60	6,152.0	362.6	594.0	387,945.26	755,885.77	32° 3' 52.736 N	103° 38' 26.651 W	
6,300.0	8.00	58.60	6,251.0	369.8	605.9	387,952.51	755,897.65	32° 3' 52.807 N	103° 38' 26.513 W	
6,400.0	8.00	58.60	6,350.0	377.1	617.8	387,959.76	755,909.53	32° 3' 52.878 N	103° 38' 26.374 W	
6,500.0	8.00	58.60	6,449.1	384.3	629.6	387,967.01	755,921.41	32° 3' 52.949 N	103° 38' 26.236 W	
6,600.0	8.00	58.60	6,548.1	391.6	641.5	387,974.26	755,933.29	32° 3' 53.020 N	103° 38' 26.097 W	
6,700.0	8.00	58.60	6,647.1	398.8	653.4	387,981.51	755,945.17	32° 3' 53.091 N	103° 38' 25.958 W	
6,800.0	8.00	58.60	6,746.1	406.1	665.3	387,988.76	755,957.05	32° 3' 53.162 N	103° 38' 25.820 W	
6,900.0	8.00	58.60	6,845.2	413.3	677.2	387,996.01	755,968.92	32° 3' 53.233 N	103° 38' 25.681 W	
7,000.0	8.00	58.60	6,944.2	420.6	689.0	388,003.26	755,980.80	32° 3' 53.304 N	103° 38' 25.543 W	
7,100.0	8.00	58.60	7,043.2	427.8	700.9	388,010.51	755,992.68	32° 3' 53.375 N	103° 38' 25.404 W	
7,200.0	8.00	58.60	7,142.3	435.1	712.8	388,017.76	756,004.56	32° 3' 53.446 N	103° 38' 25.266 W	
7,300.0	8.00	58.60	7,241.3	442.3	724.7	388,025.01	756,016.44	32° 3' 53.517 N	103° 38' 25.127 W	
7,400.0	8.00	58.60	7,340.3	449.6	736.5	388,032.26	756,028.32	32° 3' 53.588 N	103° 38' 24.988 W	
7,481.3	8.00	58.60	7,420.8	455.5	746.2	388,038.16	756,037.97	32° 3' 53.645 N	103° 38' 24.876 W	
7,500.0	7.63	58.60	7,439.3	456.8	748.4	388,039.48	756,040.14	32° 3' 53.658 N	103° 38' 24.850 W	
7,600.0	5.63	58.60	7,538.7	462.8	758.2	388,045.49	756,049.99	32° 3' 53.717 N	103° 38' 24.736 W	
7,700.0	3.63	58.60	7,638.3	467.0	765.1	388,049.69	756,056.87	32° 3' 53.758 N	103° 38' 24.655 W	
7,800.0	1.63	58.60	7,738.2	469.4	769.0	388,052.08	756,060.78	32° 3' 53.782 N	103° 38' 24.610 W	
7,881.3	0.00	0.00	7,819.5	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
7,900.0	0.00	0.00	7,838.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
8,000.0	0.00	0.00	7,938.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
8,100.0	0.00	0.00	8,038.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
8,200.0	0.00	0.00	8,138.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
8,300.0	0.00	0.00	8,238.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
8,400.0	0.00	0.00	8,338.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
8,500.0	0.00	0.00	8,438.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
8,600.0	0.00	0.00	8,538.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
8,700.0	0.00	0.00	8,638.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
8,800.0	0.00	0.00	8,738.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
8,900.0	0.00	0.00	8,838.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
9,000.0	0.00	0.00	8,938.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
9,100.0	0.00	0.00	9,038.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
9,200.0	0.00	0.00	9,138.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
9,300.0	0.00	0.00	9,238.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
9,400.0	0.00	0.00	9,338.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
9,500.0	0.00	0.00	9,438.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
9,600.0	0.00	0.00	9,538.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
9,700.0	0.00	0.00	9,638.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
9,800.0	0.00	0.00	9,738.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
9,900.0	0.00	0.00	9,838.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
10,000.0	0.00	0.00	9,938.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
10,100.0	0.00	0.00	10,038.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
10,200.0	0.00	0.00	10,138.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
10,300.0	0.00	0.00	10,238.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
10,400.0	0.00	0.00	10,338.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
10,500.0	0.00	0.00	10,438.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
10,600.0	0.00	0.00	10,538.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
10,700.0	0.00	0.00	10,638.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	

**Microsoft**  
Planning Report - Geographic

<b>Database:</b>	Old	<b>Local Co-ordinate Reference:</b>	Well Mesa #75H
<b>Company:</b>	BTA Oil Producers, LLC	<b>TVD Reference:</b>	GL @ 3251.0usft
<b>Project:</b>	Lea County, NM (NAD 83)	<b>MD Reference:</b>	GL @ 3251.0usft
<b>Site:</b>	Mesa Sec 11, T26S, R32E	<b>North Reference:</b>	Grid
<b>Well:</b>	Mesa #75H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
10,800.0	0.00	0.00	10,738.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
10,900.0	0.00	0.00	10,838.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
11,000.0	0.00	0.00	10,938.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
11,100.0	0.00	0.00	11,038.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
11,200.0	0.00	0.00	11,138.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
11,300.0	0.00	0.00	11,238.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
11,400.0	0.00	0.00	11,338.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
11,500.0	0.00	0.00	11,438.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
11,600.0	0.00	0.00	11,538.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
11,700.0	0.00	0.00	11,638.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
11,800.0	0.00	0.00	11,738.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
11,900.0	0.00	0.00	11,838.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
12,000.0	0.00	0.00	11,938.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
12,100.0	0.00	0.00	12,038.2	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
12,105.3	0.00	0.00	12,043.5	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
12,180.3	0.00	0.00	12,118.5	470.0	770.0	388,052.68	756,061.77	32° 3' 53.788 N	103° 38' 24.598 W	
12,200.0	2.36	179.72	12,138.2	469.6	770.0	388,052.27	756,061.77	32° 3' 53.784 N	103° 38' 24.598 W	
12,300.0	14.36	179.72	12,237.0	455.1	770.1	388,037.76	756,061.84	32° 3' 53.640 N	103° 38' 24.598 W	
12,400.0	26.36	179.72	12,330.6	420.3	770.2	388,003.03	756,062.01	32° 3' 53.296 N	103° 38' 24.599 W	
12,500.0	38.36	179.72	12,414.9	366.9	770.5	387,949.60	756,062.26	32° 3' 52.768 N	103° 38' 24.600 W	
12,600.0	50.36	179.72	12,486.2	297.1	770.8	387,879.81	756,062.60	32° 3' 52.077 N	103° 38' 24.601 W	
12,700.0	62.36	179.72	12,541.5	214.0	771.2	387,796.71	756,063.00	32° 3' 51.255 N	103° 38' 24.603 W	
12,800.0	74.36	179.72	12,578.3	121.2	771.7	387,703.94	756,063.44	32° 3' 50.336 N	103° 38' 24.605 W	
12,900.0	86.36	179.72	12,595.0	22.8	772.1	387,605.53	756,063.91	32° 3' 49.363 N	103° 38' 24.607 W	
12,930.3	90.00	179.72	12,596.0	-7.5	772.3	387,575.24	756,064.06	32° 3' 49.063 N	103° 38' 24.607 W	
13,000.0	90.00	179.72	12,596.0	-77.1	772.6	387,505.56	756,064.39	32° 3' 48.373 N	103° 38' 24.608 W	
13,100.0	90.00	179.72	12,596.0	-177.1	773.1	387,405.56	756,064.87	32° 3' 47.384 N	103° 38' 24.610 W	
13,200.0	90.00	179.72	12,596.0	-277.1	773.6	387,305.57	756,065.36	32° 3' 46.394 N	103° 38' 24.612 W	
13,300.0	90.00	179.72	12,596.0	-377.1	774.1	387,205.57	756,065.84	32° 3' 45.405 N	103° 38' 24.614 W	
13,400.0	90.00	179.72	12,596.0	-477.1	774.5	387,105.58	756,066.32	32° 3' 44.415 N	103° 38' 24.616 W	
13,500.0	90.00	179.72	12,596.0	-577.1	775.0	387,005.58	756,066.80	32° 3' 43.426 N	103° 38' 24.618 W	
13,600.0	90.00	179.72	12,596.0	-677.1	775.5	386,905.59	756,067.28	32° 3' 42.436 N	103° 38' 24.620 W	
13,700.0	90.00	179.72	12,596.0	-777.1	776.0	386,805.59	756,067.76	32° 3' 41.447 N	103° 38' 24.622 W	
13,800.0	90.00	179.72	12,596.0	-877.1	776.5	386,705.60	756,068.24	32° 3' 40.457 N	103° 38' 24.624 W	
13,900.0	90.00	179.72	12,596.0	-977.1	776.9	386,605.60	756,068.72	32° 3' 39.467 N	103° 38' 24.625 W	
14,000.0	90.00	179.72	12,596.0	-1,077.1	777.4	386,505.61	756,069.20	32° 3' 38.478 N	103° 38' 24.627 W	
14,100.0	90.00	179.72	12,596.0	-1,177.1	777.9	386,405.61	756,069.68	32° 3' 37.488 N	103° 38' 24.629 W	
14,200.0	90.00	179.72	12,596.0	-1,277.1	778.4	386,305.62	756,070.16	32° 3' 36.499 N	103° 38' 24.631 W	
14,300.0	90.00	179.72	12,596.0	-1,377.1	778.9	386,205.62	756,070.64	32° 3' 35.509 N	103° 38' 24.633 W	
14,400.0	90.00	179.72	12,596.0	-1,477.1	779.4	386,105.63	756,071.12	32° 3' 34.520 N	103° 38' 24.635 W	
14,500.0	90.00	179.72	12,596.0	-1,577.1	779.8	386,005.63	756,071.60	32° 3' 33.530 N	103° 38' 24.637 W	
14,600.0	90.00	179.72	12,596.0	-1,677.1	780.3	385,905.64	756,072.08	32° 3' 32.541 N	103° 38' 24.639 W	
14,700.0	90.00	179.72	12,596.0	-1,777.1	780.8	385,805.64	756,072.56	32° 3' 31.551 N	103° 38' 24.640 W	
14,800.0	90.00	179.72	12,596.0	-1,877.1	781.3	385,705.65	756,073.04	32° 3' 30.562 N	103° 38' 24.642 W	
14,900.0	90.00	179.72	12,596.0	-1,977.1	781.8	385,605.65	756,073.52	32° 3' 29.572 N	103° 38' 24.644 W	
15,000.0	90.00	179.72	12,596.0	-2,077.1	782.2	385,505.66	756,074.00	32° 3' 28.583 N	103° 38' 24.646 W	
15,100.0	90.00	179.72	12,596.0	-2,177.1	782.7	385,405.66	756,074.48	32° 3' 27.593 N	103° 38' 24.648 W	
15,200.0	90.00	179.72	12,596.0	-2,277.1	783.2	385,305.67	756,074.96	32° 3' 26.603 N	103° 38' 24.650 W	
15,300.0	90.00	179.72	12,596.0	-2,377.1	783.7	385,205.67	756,075.44	32° 3' 25.614 N	103° 38' 24.652 W	
15,400.0	90.00	179.72	12,596.0	-2,477.1	784.2	385,105.68	756,075.92	32° 3' 24.624 N	103° 38' 24.654 W	
15,500.0	90.00	179.72	12,596.0	-2,577.1	784.6	385,005.68	756,076.40	32° 3' 23.635 N	103° 38' 24.655 W	
15,600.0	90.00	179.72	12,596.0	-2,677.1	785.1	384,905.69	756,076.88	32° 3' 22.645 N	103° 38' 24.657 W	
15,700.0	90.00	179.72	12,596.0	-2,777.1	785.6	384,805.69	756,077.36	32° 3' 21.656 N	103° 38' 24.659 W	
15,800.0	90.00	179.72	12,596.0	-2,877.1	786.1	384,705.70	756,077.84	32° 3' 20.666 N	103° 38' 24.661 W	
15,900.0	90.00	179.72	12,596.0	-2,977.1	786.6	384,605.70	756,078.32	32° 3' 19.677 N	103° 38' 24.663 W	

**Microsoft**  
Planning Report - Geographic

<b>Database:</b>	Old	<b>Local Co-ordinate Reference:</b>	Well Mesa #75H
<b>Company:</b>	BTA Oil Producers, LLC	<b>TVD Reference:</b>	GL @ 3251.0usft
<b>Project:</b>	Lea County, NM (NAD 83)	<b>MD Reference:</b>	GL @ 3251.0usft
<b>Site:</b>	Mesa Sec 11, T26S, R32E	<b>North Reference:</b>	Grid
<b>Well:</b>	Mesa #75H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
16,000.0	90.00	179.72	12,596.0	-3,077.1	787.0	384,505.71	756,078.80	32° 3' 18.687 N	103° 38' 24.665 W	
16,100.0	90.00	179.72	12,596.0	-3,177.1	787.5	384,405.71	756,079.28	32° 3' 17.698 N	103° 38' 24.667 W	
16,200.0	90.00	179.72	12,596.0	-3,277.1	788.0	384,305.72	756,079.76	32° 3' 16.708 N	103° 38' 24.669 W	
16,300.0	90.00	179.72	12,596.0	-3,377.1	788.5	384,205.72	756,080.24	32° 3' 15.718 N	103° 38' 24.671 W	
16,400.0	90.00	179.72	12,596.0	-3,477.1	789.0	384,105.73	756,080.72	32° 3' 14.729 N	103° 38' 24.672 W	
16,500.0	90.00	179.72	12,596.0	-3,577.1	789.4	384,005.73	756,081.20	32° 3' 13.739 N	103° 38' 24.674 W	
16,600.0	90.00	179.72	12,596.0	-3,677.1	789.9	383,905.74	756,081.68	32° 3' 12.750 N	103° 38' 24.676 W	
16,700.0	90.00	179.72	12,596.0	-3,777.1	790.4	383,805.74	756,082.16	32° 3' 11.760 N	103° 38' 24.678 W	
16,800.0	90.00	179.72	12,596.0	-3,877.1	790.9	383,705.75	756,082.64	32° 3' 10.771 N	103° 38' 24.680 W	
16,900.0	90.00	179.72	12,596.0	-3,977.1	791.4	383,605.75	756,083.12	32° 3' 9.781 N	103° 38' 24.682 W	
17,000.0	90.00	179.72	12,596.0	-4,077.1	791.8	383,505.76	756,083.60	32° 3' 8.792 N	103° 38' 24.684 W	
17,100.0	90.00	179.72	12,596.0	-4,177.1	792.3	383,405.76	756,084.08	32° 3' 7.802 N	103° 38' 24.686 W	
17,200.0	90.00	179.72	12,596.0	-4,277.1	792.8	383,305.77	756,084.56	32° 3' 6.813 N	103° 38' 24.687 W	
17,300.0	90.00	179.72	12,596.0	-4,377.1	793.3	383,205.77	756,085.04	32° 3' 5.823 N	103° 38' 24.689 W	
17,400.0	90.00	179.72	12,596.0	-4,477.1	793.8	383,105.78	756,085.52	32° 3' 4.834 N	103° 38' 24.691 W	
17,500.0	90.00	179.72	12,596.0	-4,577.1	794.2	383,005.78	756,086.00	32° 3' 3.844 N	103° 38' 24.693 W	
17,600.0	90.00	179.72	12,596.0	-4,677.1	794.7	382,905.79	756,086.48	32° 3' 2.854 N	103° 38' 24.695 W	
17,700.0	90.00	179.72	12,596.0	-4,777.1	795.2	382,805.79	756,086.96	32° 3' 1.865 N	103° 38' 24.697 W	
17,727.5	90.00	179.72	12,596.0	-4,804.6	795.3	382,778.30	756,087.10	32° 3' 1.593 N	103° 38' 24.697 W	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
Mesa #75H BHL	0.00	0.00	12,596.0	-4,804.6	795.3	382,778.30	756,087.10	32° 3' 1.593 N	103° 38' 24.697 W	
- hit/miss target										
- Shape										
- plan hits target center										
- Point										



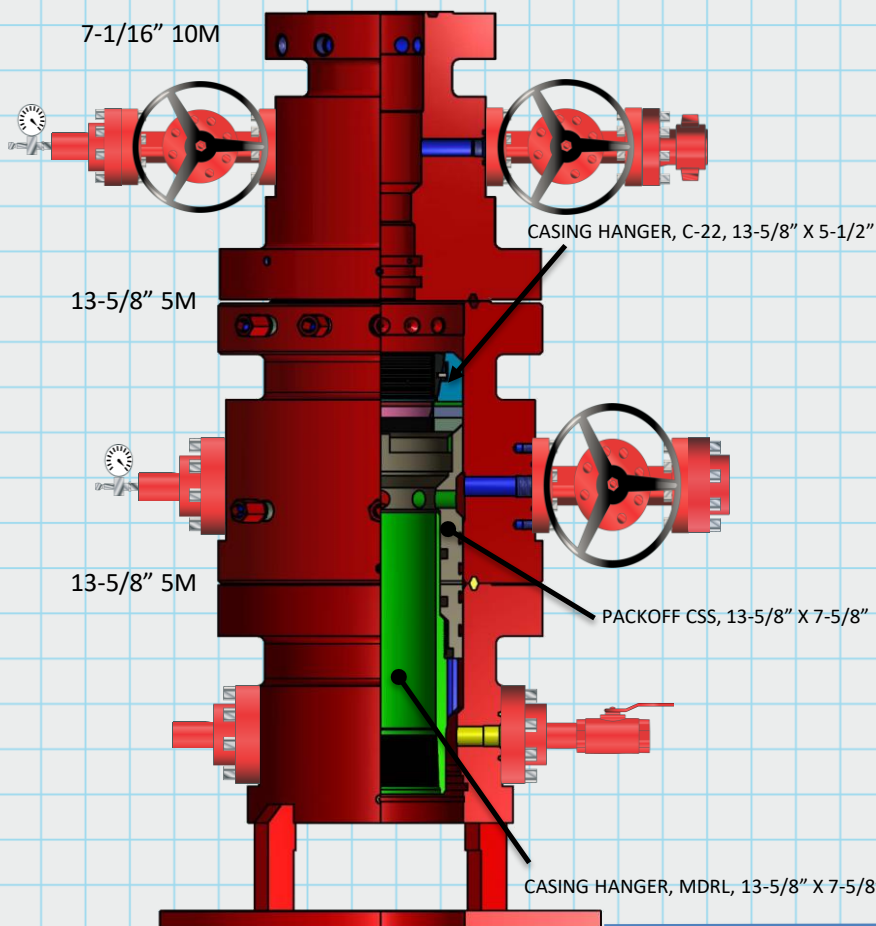


**TOTAL LENGTH = 78'-3/8"**

**TUBING SPOOL**

**SW-TCM**

13-5/8" 5M x 7-1/16" 10M  
5-1/2" PP SEAL  
w/ (2) 1-13/16" 10M SSO



**SW-MB SPOOL ASSEMBLY**

**UPPER MBH**

13-5/8" 5M x 13-5/8" 5M  
w/ (2) 2-1/16" 5M SSO

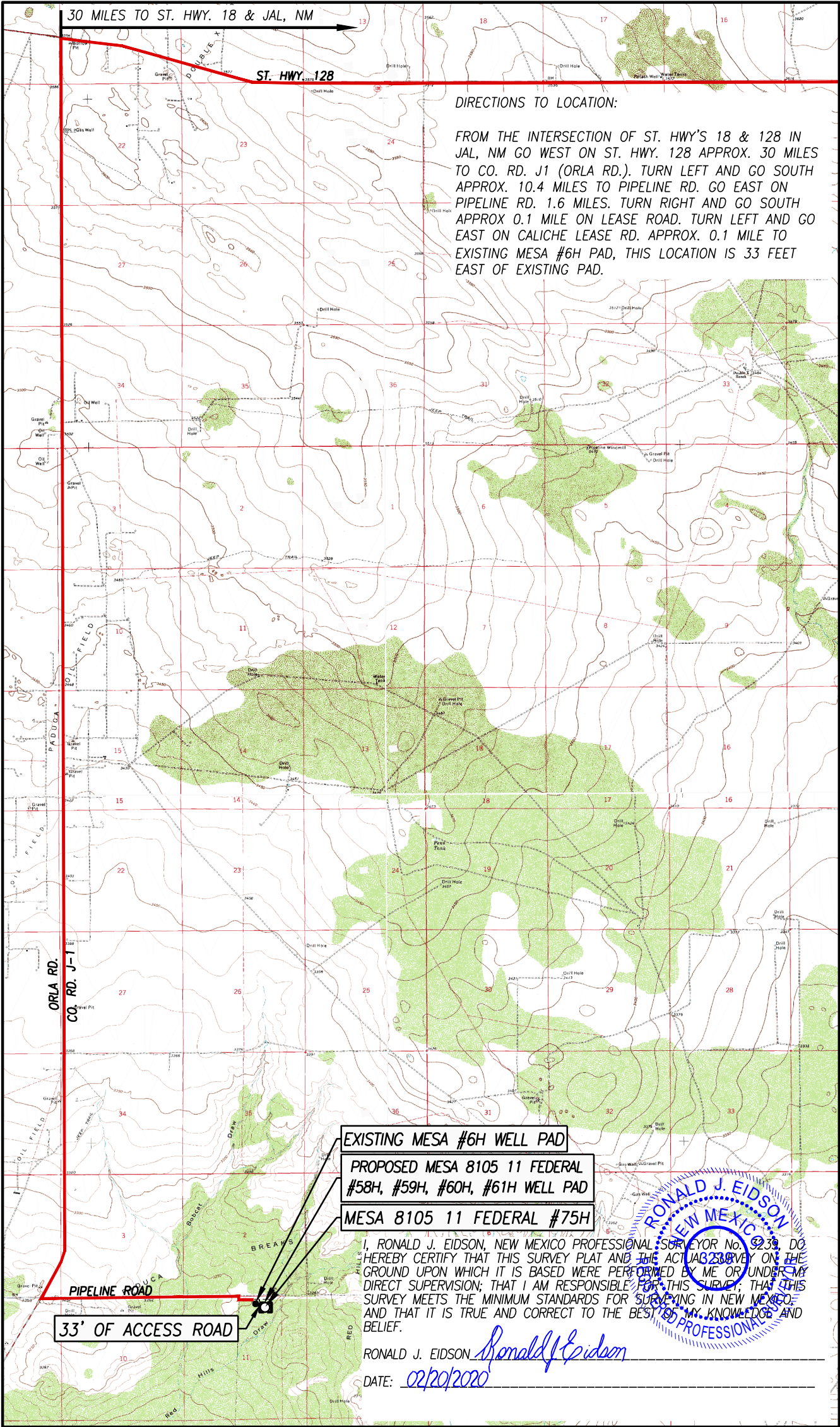
**CASING HEAD ASSEMBLY**

**LOWER MBH**

13-5/8" 5M x 10-3/4" SOW  
w/ (2) 2-1/16" 5M SSO

**10-3/4" SOW x 7-5/8" x 5-1/2"**





SEC. 11 TWP. 26-S RGE. 32-E  
COUNTY LEA STATE NEW MEXICO  
DESCRIPTION 490' FNL & 1760' FEL  
ELEVATION 3251'  
OPERATOR BTA OIL PRODUCERS, LLC  
LEASE MESA 8105 11 FEDERAL  
U.S.G.S. TOPOGRAPHIC MAP  
PADUCA BREAKS EAST, N.M. SURVEY N.M.P.M.

CONTOUR INTERVAL: PADUCA BREAKS SW, N.M. - 10'  
BELL, N.M. - 10', PADUCA BREAKS EAST, N.M. - 10'  
SCALE: 1" = 5280'



PROVIDING SURVEYING SERVICES  
SINCE 1946  
JOHN WEST SURVEYING COMPANY  
412 N. DAL PASO HOBBS, N.M. 88240  
(575) 393-3117 www.jwsc.biz  
TBPLS# 10021000



**DISTRICT I**  
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**DISTRICT II**  
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**DISTRICT III**  
1000 Rio Brazos Road, Aztec, NM 87410  
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**DISTRICT IV**  
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Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

□AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code	Pool Name
			WC-025 ; Middle Wolfcamp
Property Code	Property Name		Well Number
	MESA 8105 11 FEDERAL		75H
OGRID No.	Operator Name		Elevation
260297	BTA OIL PRODUCERS, LLC		3251'

### Surface Location

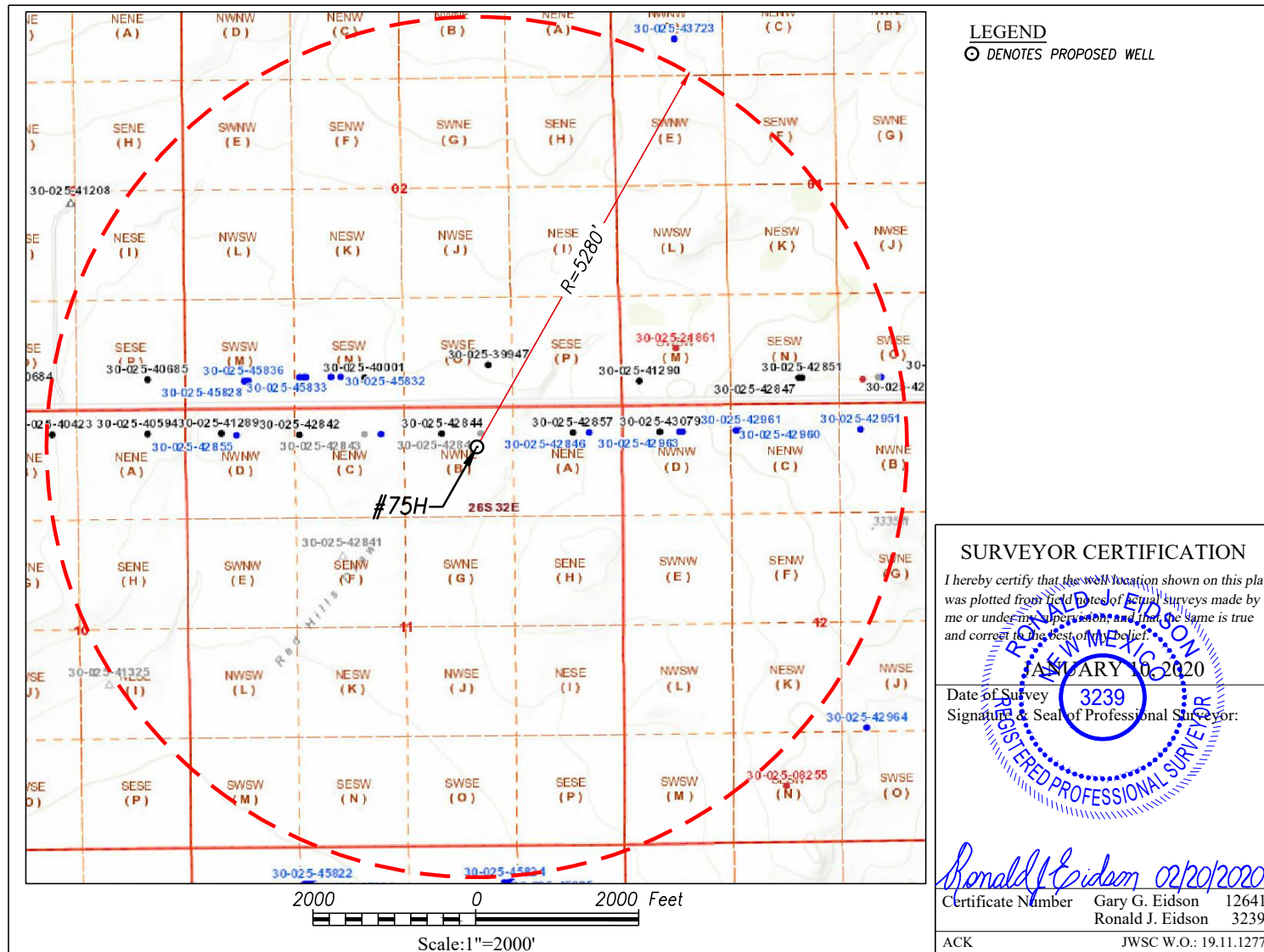
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	11	26-S	32-E		490	NORTH	1760	EAST	LEA

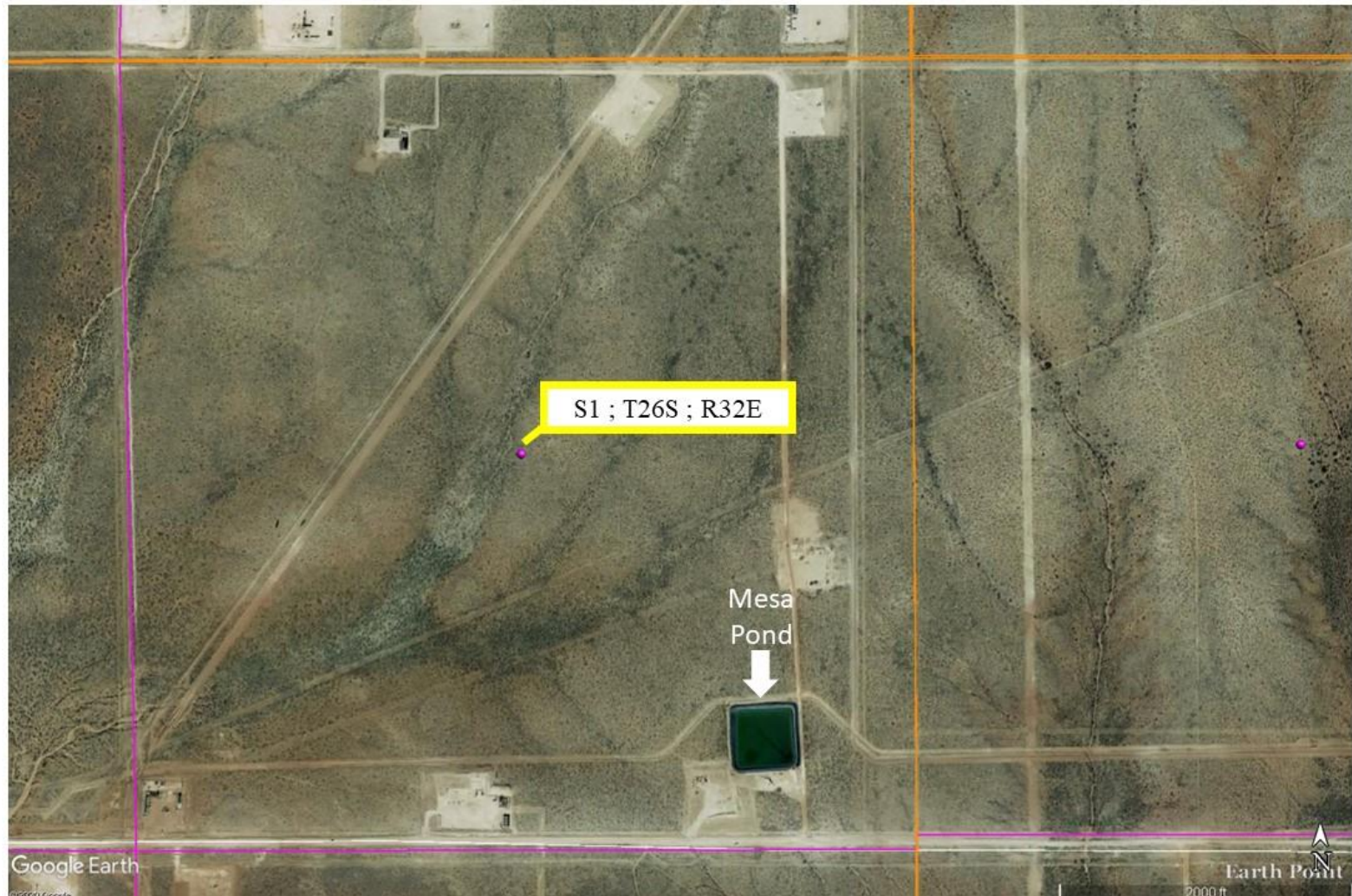
## Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	11	26-S	32-E		50	SOUTH	990	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order 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

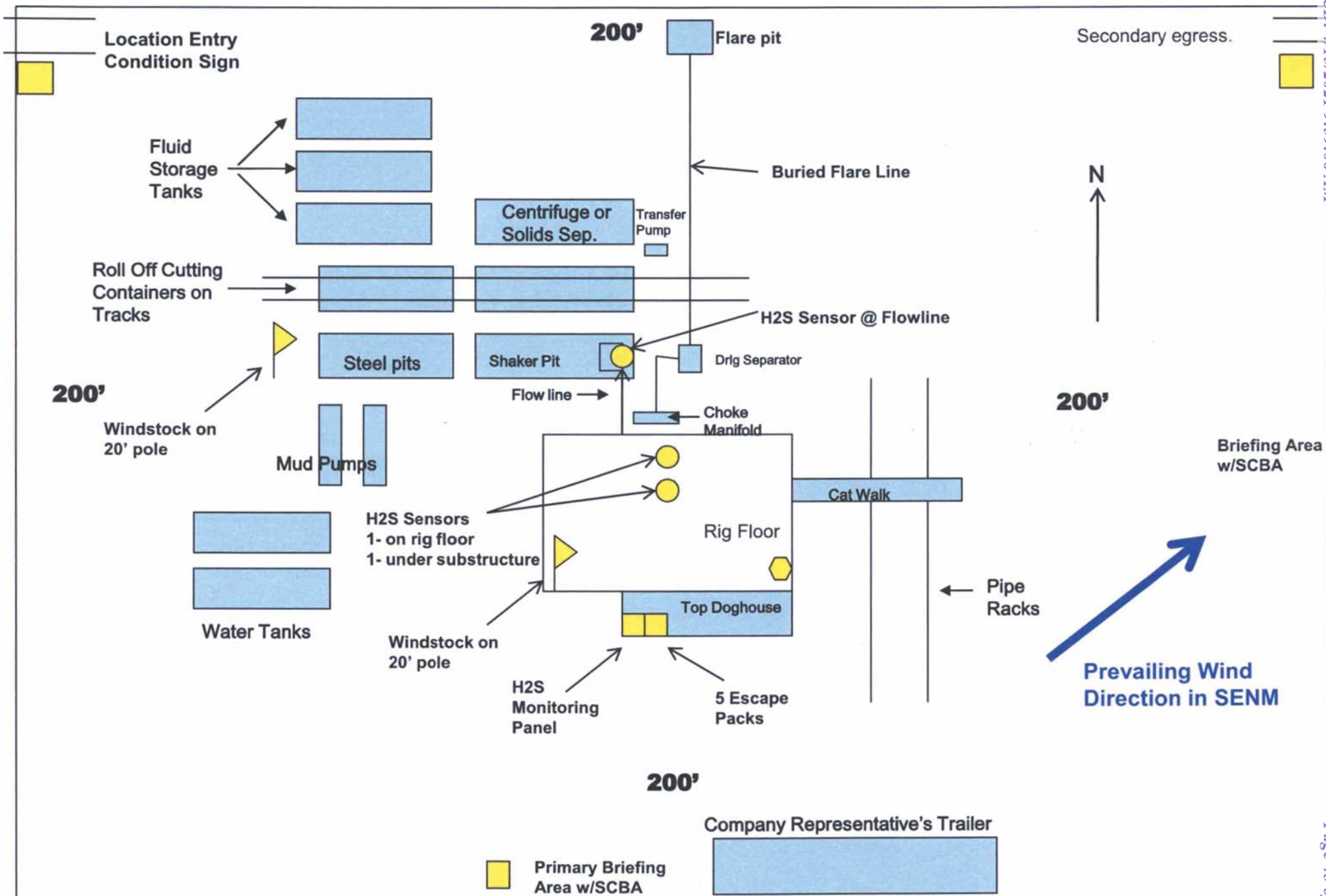




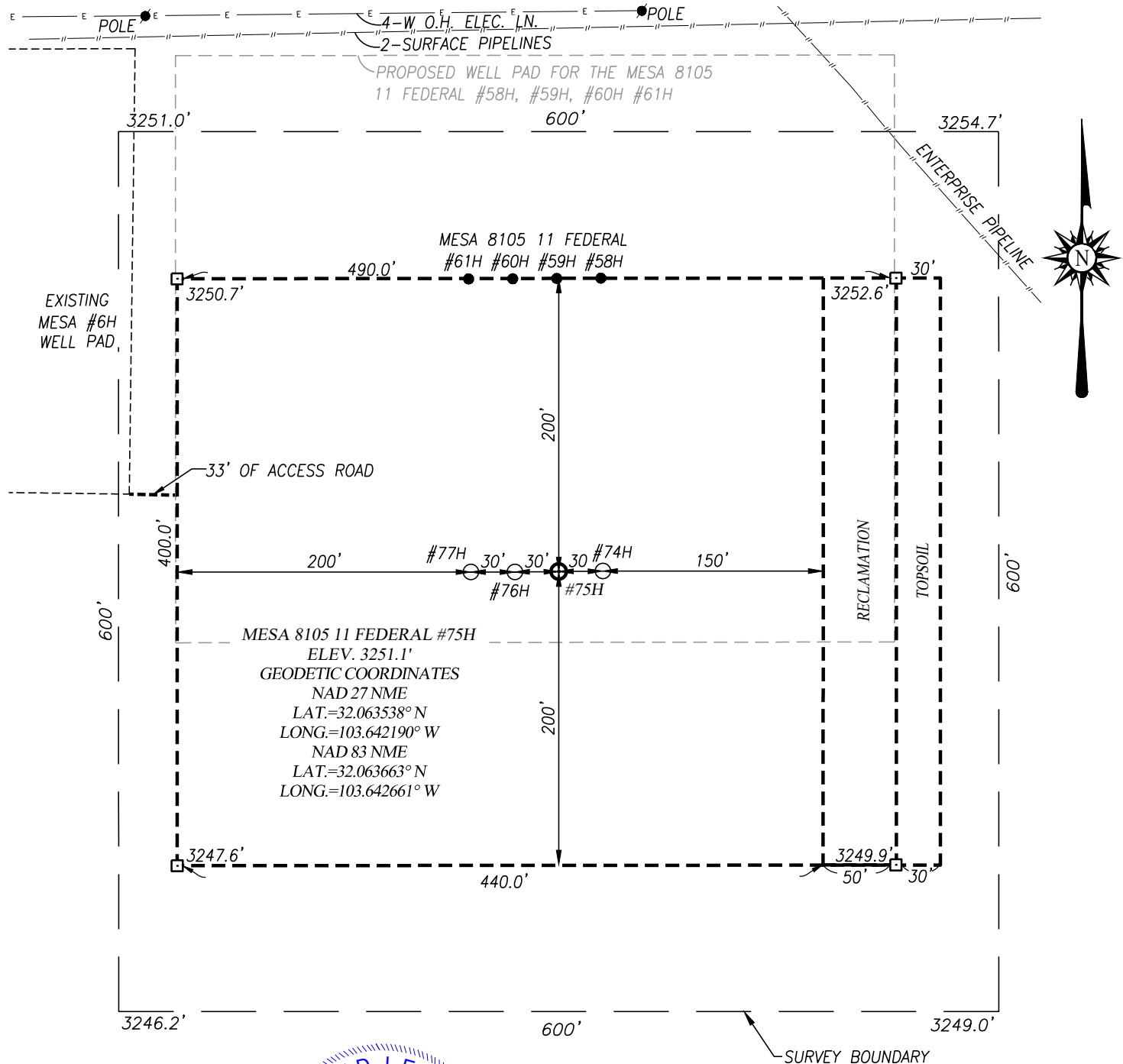
BTA OIL PRODUCERS, LLC  
WATER TRANSPORTATION MAP  
MESA 8105 FEDERAL WATER TRANSPORT MAP  
SEC 1; T26S ; R32E (Water Pit is in SESE QUARTER QUARTER)  
LEA COUNTY, NM







# WELL SITE PLAN



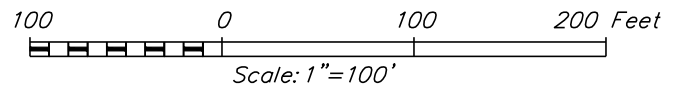
I, RONALD J. EIDSON, NEW MEXICO PROFESSIONAL SURVEYOR No. 3239, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

RONALD J. EIDSON *Ronald J. Eidson*

DATE: *02/20/2020*

NOTE:

SEE "TOPOGRAPHICAL AND ACCESS ROAD MAP" FOR ACCESS ROAD LOCATION.



## BTA OIL PRODUCERS, LLC

MESA 8105 11 FEDERAL #75H WELL LOCATED 490 FEET FROM THE NORTH LINE AND 1760 FEET FROM THE EAST LINE OF SECTION 11, TOWNSHIP 26 SOUTH, RANGE 32 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO

Survey Date: 1/10/2020

CAD Date: 2/20/2020

Drawn By: ACK

W.O. No.: 19111277

Rev: .

Rel. W.O.:

Sheet 1 of 1



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TBPLS# 10021000





U.S. Department of the Interior  
BUREAU OF LAND MANAGEMENT

## PWD Data Report

04/14/2021

**APD ID:** 10400058336

**Submission Date:** 06/23/2020

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** MESA 8105 11 FEDERAL

**Well Number:** 75H

**Well Type:** OIL WELL

**Well Work Type:** Drill

### Section 1 - General

**Would you like to address long-term produced water disposal?** NO

### Section 2 - Lined Pits

**Would you like to utilize Lined Pit PWD options?** N

**Produced Water Disposal (PWD) Location:**

**PWD surface owner:**

**PWD disturbance (acres):**

**Lined pit PWD on or off channel:**

**Lined pit PWD discharge volume (bbl/day):**

**Lined pit specifications:**

**Pit liner description:**

**Pit liner manufacturers information:**

**Precipitated solids disposal:**

**Describe precipitated solids disposal:**

**Precipitated solids disposal permit:**

**Lined pit precipitated solids disposal schedule:**

**Lined pit precipitated solids disposal schedule attachment:**

**Lined pit reclamation description:**

**Lined pit reclamation attachment:**

**Leak detection system description:**

**Leak detection system attachment:**

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** MESA 8105 11 FEDERAL

**Well Number:** 75H

**Lined pit Monitor description:**

**Lined pit Monitor attachment:**

**Lined pit: do you have a reclamation bond for the pit?**

**Is the reclamation bond a rider under the BLM bond?**

**Lined pit bond number:**

**Lined pit bond amount:**

**Additional bond information attachment:**

### Section 3 - Unlined Pits

**Would you like to utilize Unlined Pit PWD options?** N

**Produced Water Disposal (PWD) Location:**

**PWD disturbance (acres):**

**PWD surface owner:**

**Unlined pit PWD on or off channel:**

**Unlined pit PWD discharge volume (bbl/day):**

**Unlined pit specifications:**

**Precipitated solids disposal:**

**Describe precipitated solids disposal:**

**Precipitated solids disposal permit:**

**Unlined pit precipitated solids disposal schedule:**

**Unlined pit precipitated solids disposal schedule attachment:**

**Unlined pit reclamation description:**

**Unlined pit reclamation attachment:**

**Unlined pit Monitor description:**

**Unlined pit Monitor attachment:**

**Do you propose to put the produced water to beneficial use?**

**Beneficial use user confirmation:**

**Estimated depth of the shallowest aquifer (feet):**

**Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?**

**TDS lab results:**

**Geologic and hydrologic evidence:**

**State authorization:**

**Unlined Produced Water Pit Estimated percolation:**

**Unlined pit: do you have a reclamation bond for the pit?**

**Operator Name:** BTA OIL PRODUCERS LLC**Well Name:** MESA 8105 11 FEDERAL**Well Number:** 75H**Is the reclamation bond a rider under the BLM bond?****Unlined pit bond number:****Unlined pit bond amount:****Additional bond information attachment:**

#### Section 4 - Injection

**Would you like to utilize Injection PWD options?** N**Produced Water Disposal (PWD) Location:****PWD surface owner:****PWD disturbance (acres):****Injection PWD discharge volume (bbl/day):****Injection well mineral owner:****Injection well type:****Injection well number:****Injection well name:****Assigned injection well API number?****Injection well API number:****Injection well new surface disturbance (acres):****Minerals protection information:****Mineral protection attachment:****Underground Injection Control (UIC) Permit?****UIC Permit attachment:**

#### Section 5 - Surface Discharge

**Would you like to utilize Surface Discharge PWD options?** N**Produced Water Disposal (PWD) Location:****PWD surface owner:****PWD disturbance (acres):****Surface discharge PWD discharge volume (bbl/day):****Surface Discharge NPDES Permit?****Surface Discharge NPDES Permit attachment:****Surface Discharge site facilities information:****Surface discharge site facilities map:**

#### Section 6 - Other

**Would you like to utilize Other PWD options?** N**Produced Water Disposal (PWD) Location:****PWD surface owner:****PWD disturbance (acres):****Other PWD discharge volume (bbl/day):**

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** MESA 8105 11 FEDERAL

**Well Number:** 75H

**Other PWD type description:**

**Other PWD type attachment:**

**Have other regulatory requirements been met?**

**Other regulatory requirements attachment:**



U.S. Department of the Interior  
BUREAU OF LAND MANAGEMENT

## Bond Info Data Report

04/14/2021

**APD ID:** 10400058336

**Submission Date:** 06/23/2020

Highlighted data  
reflects the most  
recent changes

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** MESA 8105 11 FEDERAL

**Well Number:** 75H

[Show Final Text](#)

**Well Type:** OIL WELL

**Well Work Type:** Drill

### Bond Information

**Federal/Indian APD:** FED

**BLM Bond number:** NMB001711

**BIA Bond number:**

**Do you have a reclamation bond?** NO

**Is the reclamation bond a rider under the BLM bond?**

**Is the reclamation bond BLM or Forest Service?**

**BLM reclamation bond number:**

**Forest Service reclamation bond number:**

**Forest Service reclamation bond attachment:**

**Reclamation bond number:**

**Reclamation bond amount:**

**Reclamation bond rider amount:**

**Additional reclamation bond information attachment:**

**DISTRICT I**  
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Santa Fe, New Mexico 87505

Form C-102  
Revised August 1, 2011  
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## □ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <b>30-025-48721</b>	Pool Code <b>98158</b>	Pool Name <b>WC-025 ; Middle Wolfcamp</b>
Property Code <b>328173</b>	Property Name <b>MESA 8105 11 FEDERAL</b>	Well Number <b>75H</b>
OGRID No. <b>260297</b>	Operator Name <b>BTA OIL PRODUCERS, LLC</b>	Elevation <b>3251'</b>

Surface Location									
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	11	26-S	32-E		490	NORTH	1760	EAST	LEA

Bottom Hole Location If Different From Surface									
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	11	26-S	32-E		50	SOUTH	990	EAST	LEA

Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.
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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

<p><b>SURFACE LOCATION GEODETIC COORDINATES</b> NAD 27 NME Y=387525.3 N X=714105.0 E LAT.=32.063538° N LONG.=103.642190° W</p> <p><b>FIRST TAKE POINT</b> NAD 27 NME Y=387919.9 N X=714872.5 E LAT.=32.064609° N LONG.=103.639705° W</p> <p><b>CORNER COORDINATES TABLE</b> NAD 27 NME</p> <p>A - Y=388009.7 N, X=713187.5 E B - Y=388017.7 N, X=714524.6 E C - Y=388025.8 N, X=715861.6 E D - Y=382669.1 N, X=714562.7 E E - Y=382677.2 N, X=715890.2 E</p> <p><b>CORNER COORDINATES TABLE</b> NAD 83 NME</p> <p>A - Y=388067.1 N, X=754374.2 E B - Y=388075.2 N, X=755711.3 E C - Y=388083.2 N, X=757048.4 E D - Y=382726.4 N, X=755749.7 E E - Y=382734.5 N, X=757077.2 E</p> <p><b>LAST TAKE POINT</b> NAD 27 NME Y=382771.1 N X=714899.8 E LAT.=32.050455° N LONG.=103.639724° W</p> <p><b>BOTTOM HOLE LOCATION</b> NAD 27 NME Y=382721.1 N X=714900.1 E LAT.=32.050318° N LONG.=103.639724° W</p>	<p><b>SURFACE LOCATION GEODETIC COORDINATES</b> NAD 83 NME Y=387582.7 N X=755291.8 E LAT.=32.063663° N LONG.=103.642661° W</p> <p><b>FIRST TAKE POINT</b> NAD 83 NME Y=387977.3 N X=756059.2 E LAT.=32.064734° N LONG.=103.640176° W</p> <p><b>CORNER COORDINATES TABLE</b> NAD 83 NME</p> <p>A - Y=388067.1 N, X=754374.2 E B - Y=388075.2 N, X=755711.3 E C - Y=388083.2 N, X=757048.4 E D - Y=382726.4 N, X=755749.7 E E - Y=382734.5 N, X=757077.2 E</p> <p><b>LAST TAKE POINT</b> NAD 83 NME Y=382828.3 N X=756086.8 E LAT.=32.050580° N LONG.=103.640194° W</p> <p><b>BOTTOM HOLE LOCATION</b> NAD 83 NME Y=382778.3 N X=756087.1 E LAT.=32.050443° N LONG.=103.640194° W</p>	<p>GRID AZ.=62°47'20" HORIZ. DIST.=863.1'</p> <p>GRID AZ.=179°41'34" HORIZ. DIST.=5200.0'</p>
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## OPERATOR CERTIFICATION

*I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.*

Signature

5/5/2020  
Date

## Sammy Hajar

Printed Name \_\_\_\_\_

SHAJAR@BTAOIL.COM

E-mail Address

### SURVEYOR CERTIFICATION

*I hereby certify that the well location shown on this plat was plotted from field notes of land surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.*

Date of Survey **JANUARY 10 2020**  
 Signature & Seal of Professional Surveyor **3239**

Date of Survey

Signature & Seal of Professional Surveyor

Certificate Number

Gary G. Eidson	12641
Ronald J. Eidson	3239

ACK

IWSC W.O.: 19.11.1277



District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit Original  
to Appropriate  
District Office

### GAS CAPTURE PLAN

Date: 5/27/2020

☒ Original Operator & OGRID No.: 260297  
☐ Amended - Reason for Amendment: \_\_\_\_\_

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

#### Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
	<b>30-025-48721</b>					
MESA 8105 11		SEC 11 ; 26S ; 32E	490 FNL 1760 FEL	2000	Flared	Battery Connected
FEDERAL 75H						To ETP System

#### Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to Gas Transporter and will be connected to Gas Transporter low/high pressure gathering system located in LEA County, New Mexico. It will require 0 ' of pipeline to (ETP) connect the facility to low/high pressure gathering system. Operator provides (periodically) to Gas Transporter a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Operator and Gas Transporter have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Gas Transporter Processing Plant located in Sec.\_\_\_\_, Twn.\_\_\_\_, Rng.\_\_\_\_, \_\_\_\_\_ County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

#### Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on Gas Transporter system at that time. Based on current information, it is Operator's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

#### Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
  - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
  - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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**District III**  
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**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS  
  
Action 24171

**CONDITIONS OF APPROVAL**

Operator:			OGRID:	Action Number:	Action Type:
BTA OIL PRODUCERS, LLC      104 S Pecos      Midland, TX79701			260297	24171	FORM 3160-3
OCD Reviewer	Condition				
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104				
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string				