

NM OIL CONSERVATION
ARTESIA DISTRICT

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

JAN 03 2018

RECEIVED

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

5. Lease Serial No.
NMNM117115

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
WARREN FED COM 121H

317076

9. API Well No.

30-015-44614

1a. Type of work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator
MATADOR PRODUCTION COMPANY

3a. Address
5400 LBJ Freeway, Suite 1500 Dallas TX 7524

3b. Phone No. (include area code)
(972)371-5200

10. Field and Pool, or Exploratory
CASS DRAW / BONE SPRING 10380

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface NWNW / 170 FNL / 770 FWL / LAT 32.2829424 / LONG -104.149945

At proposed prod. zone SWSW / 240 FSL / 660 FWL / LAT 32.2693315 / LONG -104.1502974

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 25 / T23S / R27E / NMP

14. Distance in miles and direction from nearest town or post office*
3 miles

12. County or Parish
EDDY

13. State
NM

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any)
170 feet

16. No. of acres in lease
640

17. Spacing Unit dedicated to this well
160

18. Distance from proposed location*
to nearest well, drilling, completed, 0 feet
applied for, on this lease, ft.

19. Proposed Depth
7550 feet / 12381 feet

20. BLM/BIA Bond No. on file
FED: NMB001079

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3133 feet

22. Approximate date work will start*
06/01/2017

23. Estimated duration
90 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

1. Well plat certified by a registered surveyor.

2. A Drilling Plan.

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).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).

5. Operator certification

6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature
(Electronic Submission)

Name (Printed/Typed)
Brian Wood / Ph: (505)466-8120

Date
03/27/2017

Title
President

Approved by (Signature)
(Electronic Submission)

Name (Printed/Typed)
Cody Layton / Ph: (575)234-5959

Date
12/21/2017

Title
Supervisor Multiple Resources

Office
CARLSBAD

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.

(Continued on page 2)

*(Instructions on page 2)

APPROVED WITH CONDITIONS
Approval Date: 12/21/2017

RIP 1-5-18

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications.

Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Additional Operator Remarks

Location of Well

1. SHL: NWNW / 170 FNL / 770 FWL / TWSP: 23S / RANGE: 27E / SECTION: 25 / LAT: 32.2829424 / LONG: -104.149945 (TVD: 0 feet, MD: 0 feet)
PPP: NWSW / 2640 FNL / 715 FWL / TWSP: 23S / RANGE: 27E / SECTION: 25 / LAT: 32.2760409 / LONG: -104.1502993 (TVD: 7550 feet, MD: 9981 feet)
BHL: SWSW / 240 FSL / 660 FWL / TWSP: 23S / RANGE: 27E / SECTION: 25 / LAT: 32.2693315 / LONG: -104.1502974 (TVD: 7550 feet, MD: 12381 feet)

BLM Point of Contact

Name: Tenille Ortiz

Title: Legal Instruments Examiner

Phone: 5752342224

Email: tortiz@blm.gov

• •

PECOS DISTRICT DRILLING OPERATIONS CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MATADOR PRODUCTION CO.
LEASE NO.:	NMNM117115
WELL NAME & NO.:	121H – WARREN FED COM
SURFACE HOLE FOOTAGE:	170'N & 770'W
BOTTOM HOLE FOOTAGE:	240'S & 660'W
LOCATION:	Section 25 T.23 S., R.27 E., NMPM
COUNTY:	Eddy County, New Mexico

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
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	
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP

A. Hydrogen Sulfide

1. 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

1. The 13 3/8 inch surface casing shall be set at approximately 475 feet (a minimum of 25 feet 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 minimum required fill of cement behind the **9 5/8** inch intermediate casing is:
 - 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.
 - ❖ 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** 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).
2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.
- 3.

Option 1:

- i. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9 5/8** inch intermediate casing shoe shall be **3000 (3M)** psi.

Option 2:

- i. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the intermediate casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9 5/8** first intermediate casing shoe shall be **3000 (3M)** 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.

D. SPECIAL REQUIREMENT(S)

Waste Minimization Plan (WMP)

In the interest of resource development, submission of additional well gas capture development plan information is deferred but may be required by the BLM Authorized Officer at a later date.

Communitization Agreement

- The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

MHH 12092017

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 2nd 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. Operator shall perform the intermediate casing integrity test to 70% of the casing burst. This will test the multi-bowl seals.
 - 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.

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

X Original

Operator & OGRID No.: Matador Production Company (228937)

☐ Amended

Date: 12/12/17

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: A C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule 19.15.18.12.A

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
Warren Federal No. 201H	30-015-#####	UL-O Sec 25 T23S R27E	###' FNL & #,###' FWL	+/- 1,500	~21 days	Flare ~21 days on flowback before turn into TB. Time est. depends on sales connect and well cleanup.
Warren Federal No. 205H	30-015-#####	UL-O Sec 25 T23S R27E	###' FNL & #,###' FWL	+/- 1,500	~21 days	Flare ~21 days on flowback before turn into TB. Time est. depends on sales connect and well cleanup.
Warren Federal No. 221H	30-015-#####	UL-O Sec 25 T23S R27E	###' FNL & #,###' FWL	+/- 7,500	~21 days	Flare ~21 days on flowback before turn into TB. Time est. depends on sales connect and well cleanup.
Warren Federal No. 225H	30-015-#####	UL-O Sec 25 T23S R27E	###' FNL & #,###' FWL	+/- 7,500	~21 days	Flare ~21 days on flowback before turn into TB. Time est. depends on sales connect and well cleanup.
Warren Federal No. 121H	30-015-#####	UL-O Sec 25 T23S R27E	###' FNL & #,###' FWL	+/- 1,000	~21 days	Flare ~21 days on flowback before turn into TB. Time est. depends on sales connect and well cleanup.

Gathering System and Pipeline Notification

The well will be connected to a production facility after flowback operations are complete so long as the gas transporter system is in place. The gas produced from the production facility is connected to Longwood RB Pipeline, LLC's low/high pressure gathering system located in Eddy County, New Mexico. It required ~2,000' of pipeline to connect the facility to the low/high pressure gathering system. Matador Production Company periodically provides a drilling, completion and

Approval Date: 12/21/2017

estimated first production date for wells that are scheduled to be drilled in the foreseeable future to Longwood RB Pipeline, LLC. If changes occur that will affect the drilling and completion schedule, Matador Production Company will notify Longwood RB Pipeline, LLC. Additionally, the gas produced from the well will be processed at a processing plant further downstream and, although unanticipated, any issues with downstream facilities could cause flaring at the wellhead. The actual flow of the gas will be based on compression operating parameters and gathering system pressures measured when the well starts producing.

Flowback Strategy

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

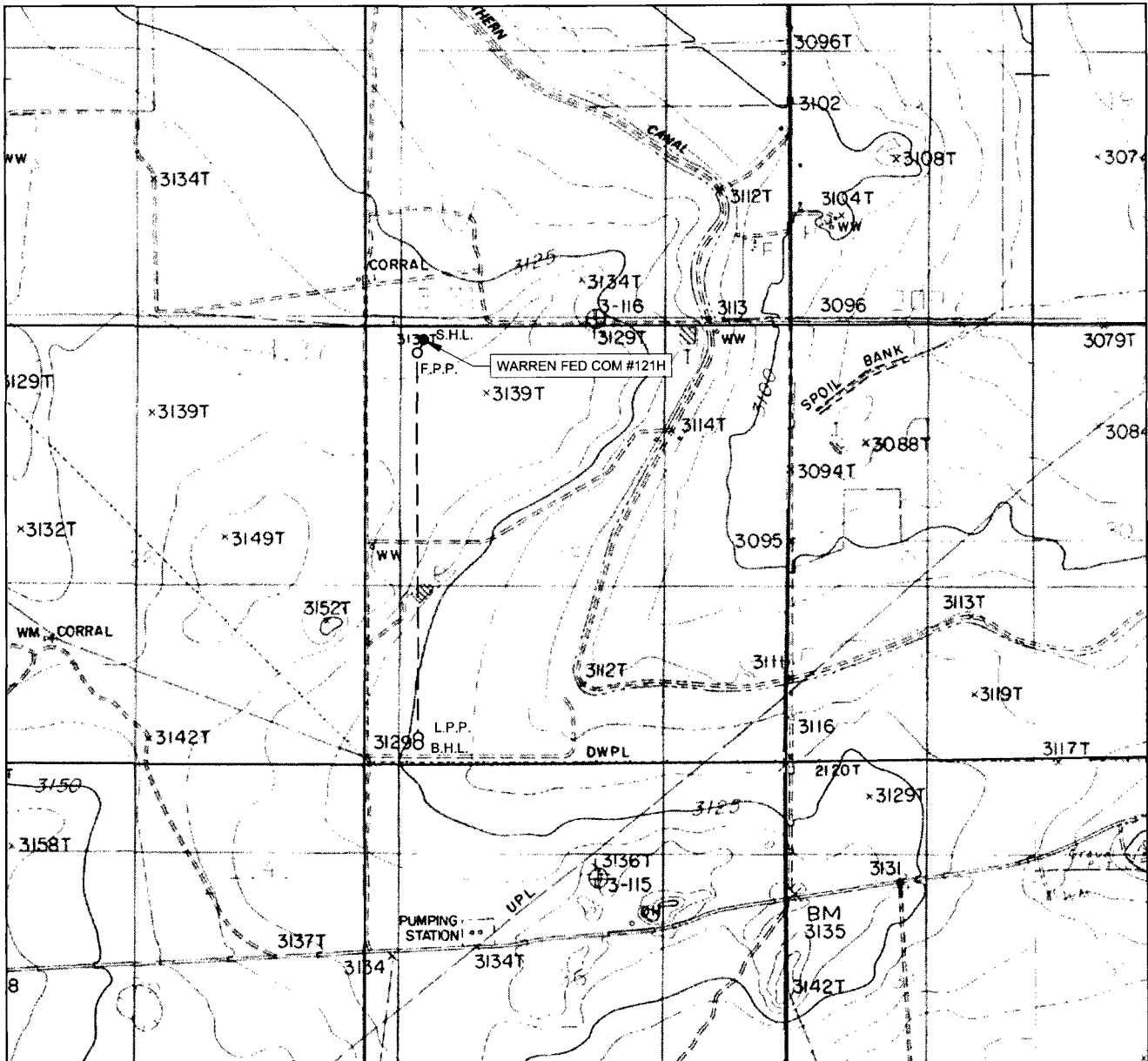
Safety requirements during cleanout operations may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

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

- Power Generation – On lease
 - Operating a generator will only utilize a portion of the produced gas and the remainder of gas would still need to be flared.
 - Power Company has to be willing to purchase gas back and if they are willing they require a 5 year commitment to supply the agreed upon amount of power back to them. With gas decline rates and unpredictability of markets it is impossible to agree to such long term demands. If the demands are not met then operator is burdened with penalty for not delivering.
- Compressed Natural Gas – On lease
 - Compressed Natural Gas is likely to be uneconomic to operate when the gas volume declines.
- NGL Removal – On lease
 - NGL Removal requires a plant and is expensive on such a small scale rendering it uneconomic and still requires residue gas to be flared.

LOCATION & ELEVATION VERIFICATION MAP



LEASE NAME & WELL NO.: WARREN FED COM #121H

SECTION 25 TWP 23-S RGE 27-E SURVEY N.M.P.M.
 COUNTY EDDY STATE NM ELEVATION 3133'
 DESCRIPTION 170' FNL & 770' FWL

LATITUDE N 32.2828225 LONGITUDE W 104.1494478



SCALE: 1" = 2000'
 0' 1000' 2000'

THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

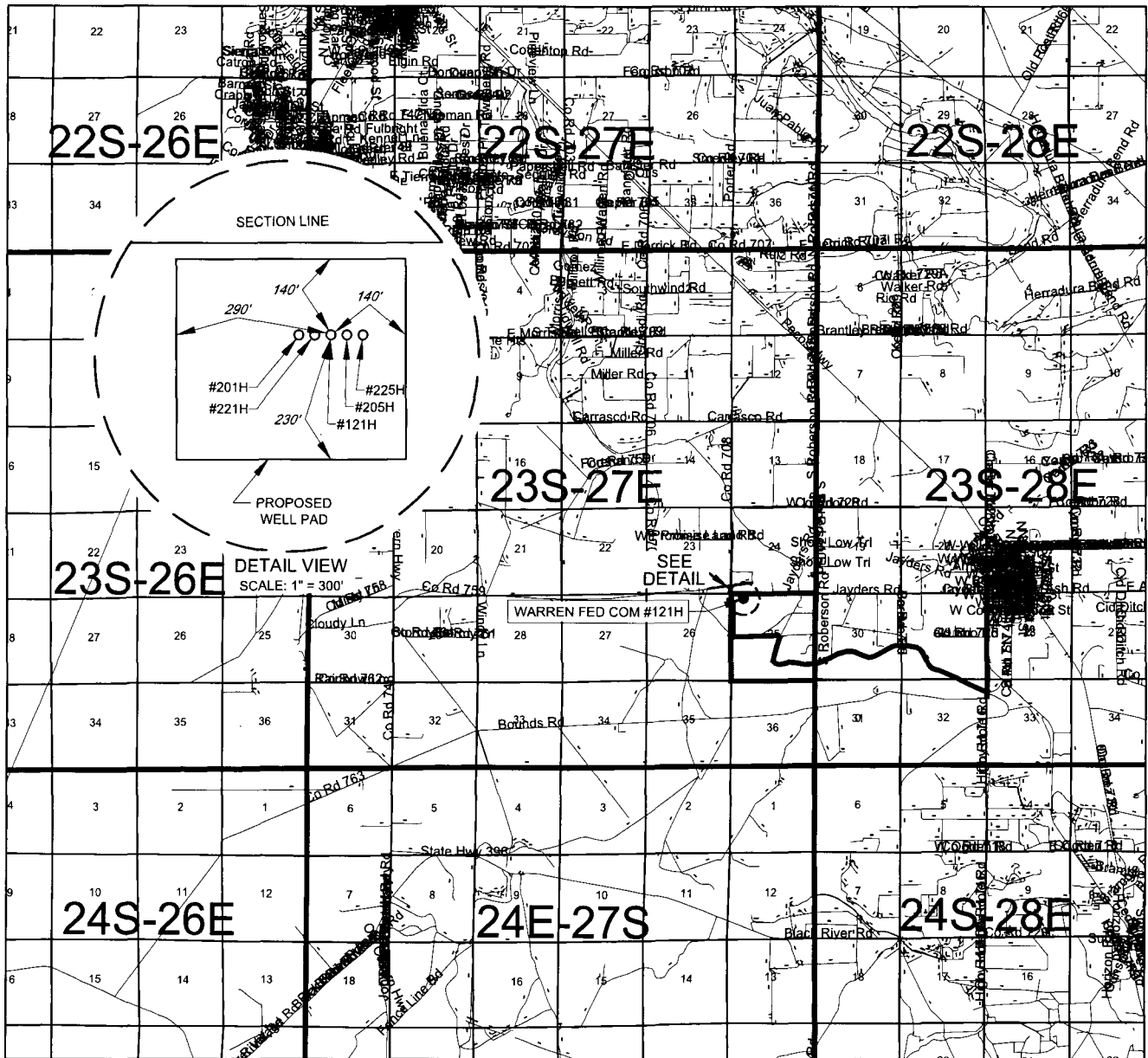
ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE OF THE NORTH AMERICAN DATUM 1927, U.S. SURVEY FEET.



TOPOGRAPHIC
 LOYALTY INNOVATION LEGACY

1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140
 TELEPHONE: (817) 744-7512 • FAX (817) 744-7548
 2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
 TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
 WWW.TOPOGRAPHIC.COM

VICINITY MAP



LEASE NAME & WELL NO.: WARREN FED COM #121H

SECTION 25 TWP 23-S RGE 27-E SURVEY N.M.P.M.
 COUNTY EDDY STATE NM
 DESCRIPTION 170' FNL & 770' FWL

DISTANCE & DIRECTION

FROM INT. OF US-285 & W. CEDAR ST., GO SOUTH ON US-285/SOUTH
8TH ST ±1.0 MILES, THENCE SOUTHWEST (RIGHT) ON HIGBY HOLE RD.
±0.4 MILES, THENCE WEST (RIGHT) ON BOUNDS RD. ±2.9 MILES TO A
POINT ±1900 FEET SOUTH OF THE LOCATION.

THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE OF THE NORTH AMERICAN DATUM 1927, U.S. SURVEY FEET.



SCALE: 1" = 10000'
 0' 5000' 10000'



TOPOGRAPHIC
 LOYALTY INNOVATION LEGACY

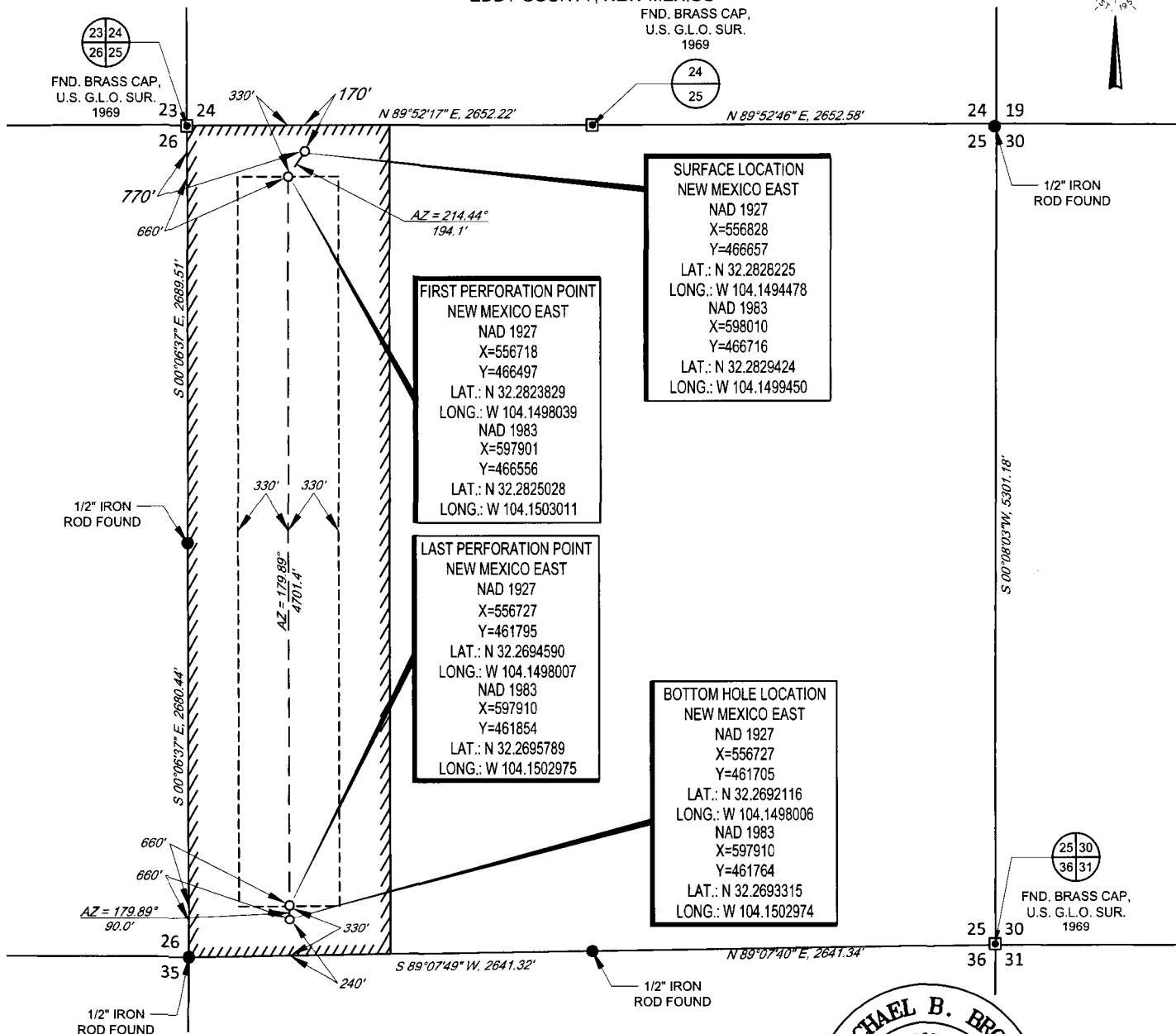
1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140
 TELEPHONE: (817) 744-7512 • FAX (817) 744-7548
 2803 NORTH BIG SPRING • MIDLAND, TEXAS 79705
 TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
 WWW.TOPOGRAPHIC.COM

SCALE: 1" = 1000'
0' 500' 1000'



SECTION 25, TOWNSHIP 23-S, RANGE 27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

FND. BRASS CAP,
U.S. G.L.O. SUR.
1969

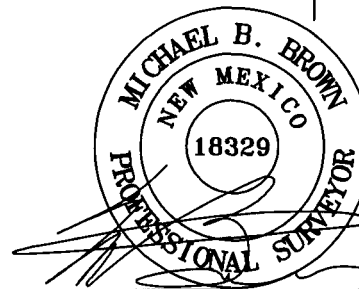


LEASE NAME & WELL NO.: WARREN FED COM #121H
SECTION 25 TWP 23-S RGE 27-E SURVEY N.M.P.M.
COUNTY EDDY STATE NM
DESCRIPTION 170' FNL & 770' FWL

DISTANCE & DIRECTION

FROM INT. OF US-285 & W. CEDAR ST., GO SOUTH ON US-285/SOUTH
8TH ST ±1.0 MILES, THENCE SOUTHWEST (RIGHT) ON HIGBY HOLE RD.
±0.4 MILES, THENCE WEST (RIGHT) ON BOUNDS RD. ±2.9 MILES TO A
POINT ±1900 FEET SOUTH OF THE LOCATION.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE OF THE NORTH AMERICAN DATUM 1927, U.S. SURVEY FEET. THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.
AS OF THE DATE OF SURVEY, ALL ABOVE GROUND APPURTENANCES WITHIN 300' OF THE STAKED LOCATION ARE SHOWN HEREON.



Michael Blake Brown, P.S. No. 18329
DECEMBER 6, 2016



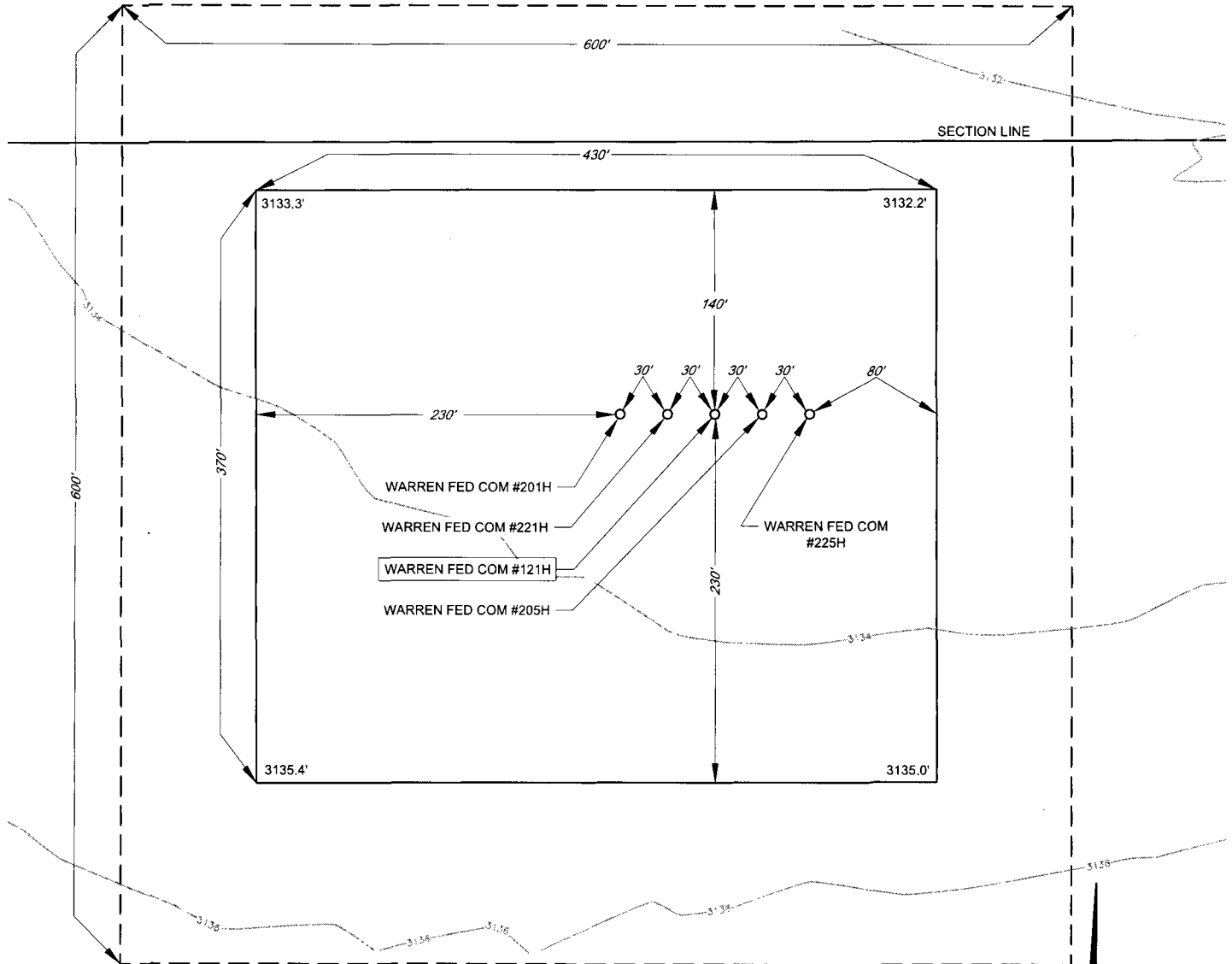
TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7548
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM



SECTION 25, TOWNSHIP 23-S, RANGE 27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

DETAIL VIEW
SCALE: 1" = 100'



LEASE NAME & WELL NO.: WARREN FED COM #121H
#121H LATITUDE N 32.2828225 #121H LONGITUDE W 104.1494478

LEGEND

--- ARCH SITE

SCALE: 1" = 100'
0' 50' 100'



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7548
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID
BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE OF THE
NORTH AMERICAN DATUM 1927, U.S. SURVEY FEET

THIS PROPOSED PAD SITE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER
MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY.
AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE AND
LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS
NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

ORIGINAL DOCUMENT SIZE: 8.5" X 11"

S:\SURVEY\MATADOR_RESOURCES\WARREN_FED_COM_121H\FINAL_PRODUCTS\LO_WARREN_FED_COM_121H_REV6.DWG 1/13/2017 8:24:55 AM ccaston

SCALE: 1" = 300'

0' 150' 300'

SECTION 25, TOWNSHIP 23-S, RANGE 27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

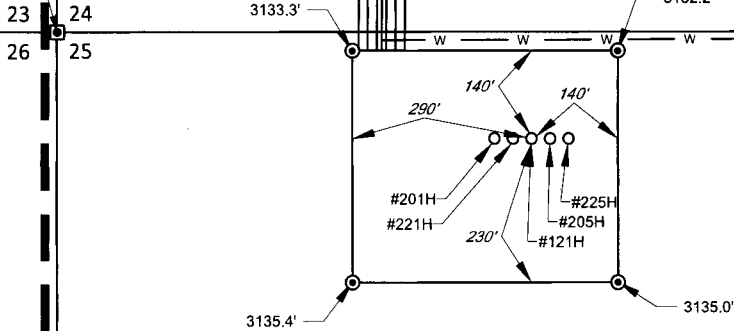


500' OFFSET AREA

4.03 ACRE
EXISTING
PRODUCTION
FACILITY SITE

WARREN FED SLOT 1
ROAD EASEMENT
WARREN FED SLOT 1
ELECTRICAL EASEMENT
WARREN FED SLOT 1
GAS LINE EASEMENT

23 24
25 26
FND. BRASS CAP.
U.S. G.L.O. SUR.
1969

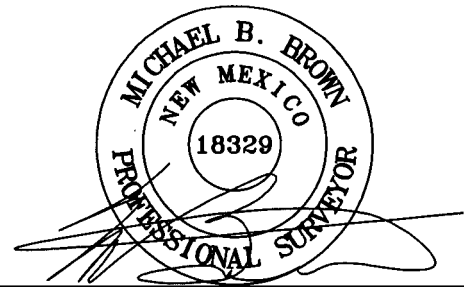


LEGEND

- 500' PROXIMITY
- W — WATER LINE
- GAS — GAS LINE
- OHE — OVERHEAD ELECTRIC
- ⊙ IRON ROD SET



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7548
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM



Michael Blake Brown, P.S. No. 18329
DECEMBER 6, 2016

WARREN FED COM
#121H
PROXIMITY MAP

REVISION:

A.V.F.	08/05/2016
A.V.F.	08/18/2016
J.S.T.	08/19/2016
E.A.H.	10/21/2016
G.J.U.	12/06/2016

DATE: 08/05/2016

FILE:LO_WARREN_FED_COM_121H_REV6

DRAWN BY: A.V.F.

SHEET: 6 OF 6

NOTES:

1. ORIGINAL DOCUMENT SIZE: 8.5" X 11"
2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1927.
3. CERTIFICATION IS MADE ONLY TO THE LOCATION OF THIS EASEMENT, IN RELATION TO THE EVIDENCE FOUND DURING A FIELD SURVEY, MADE ON THE GROUND, UNDER MY SUPERVISION, AND USING DOCUMENTATION PROVIDED BY MATADOR RESOURCES, INC. ONLY UTILITIES/EASEMENTS THAT WERE VISIBLE ON THE DATE OF THIS SURVEY, WITHIN/ADJOINING THIS EASEMENT, HAVE BEEN LOCATED AS SHOWN HEREON OF WHICH I HAVE KNOWLEDGE. THIS CERTIFICATION IS LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE, AND MADE FOR THIS TRANSACTION ONLY.

**PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL**

OPERATOR'S NAME:	MATADOR PRODUCTION CO.
LEASE NO.:	NMNM117115
WELL NAME & NO.:	121H – WARREN FED COM
SURFACE HOLE FOOTAGE:	170'N & 770'W
BOTTOM HOLE FOOTAGE	240'S & 660'W
LOCATION:	Section 25 T.23 S., R.27 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
 - Cave/Karst
 - Watershed
- ☐ **Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines
 - Electric Lines
- ☐ **Interim Reclamation**
- ☐ **Final Abandonment & Reclamation**

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Cave and Karst

** Depending on location, additional Drilling, Casing, and Cementing procedures may be required by engineering to protect critical karst groundwater recharge areas.

Cave/Karst Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production.

Construction:

In the advent that any underground voids are opened up during construction activities, construction activities will be halted and the BLM will be notified immediately.

No Blasting:

No blasting will be utilized for pad construction. The pad will be constructed and leveled by adding the necessary fill and caliche.

Pad Berming:

The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.

- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g. caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.
- If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
- The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.
- Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised. (Any access road crossing the berm cannot be lower than the berm height.)

Tank Battery Liners and Berms:

Tank battery locations and all facilities will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank.

Leak Detection System:

A method of detecting leaks is required. The method could incorporate gauges to measure loss, siting valves and lines so they can be visually inspected, or installing electronic sensors to alarm when a leak is present. Leak detection plan will be submitted to BLM for approval.

Automatic Shut-off Systems:

Automatic shut off, check valves, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns:

Rotary Drilling with Fresh Water:

Fresh water will be used as a circulating medium in zones where caves or karst features are expected. SEE ALSO: Drilling COAs for this well.

Directional Drilling:

Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone. SEE ALSO: Drilling COAs for this well.

Lost Circulation:

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported in the drilling report.

Regardless of the type of drilling machinery used, if a void of four feet or more and circulation losses greater than 70 percent occur simultaneously while drilling in any cave-bearing zone, the BLM will be notified immediately by the operator. The BLM will assess the situation and work with the operator on corrective actions to resolve the problem.

Abandonment Cementing:

Upon well abandonment in high cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

Pressure Testing:

Annual pressure monitoring will be performed by the operator on all casing annuli and reported in a sundry notice. If the test results indicated a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

Watershed

- The entire well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the

well pad. The berm shall be maintained through the life of the well and after interim reclamation has been completed.

- Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

G. ON LEASE ACCESS ROADS**Road Width**

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on both sides of the road.

Turnouts

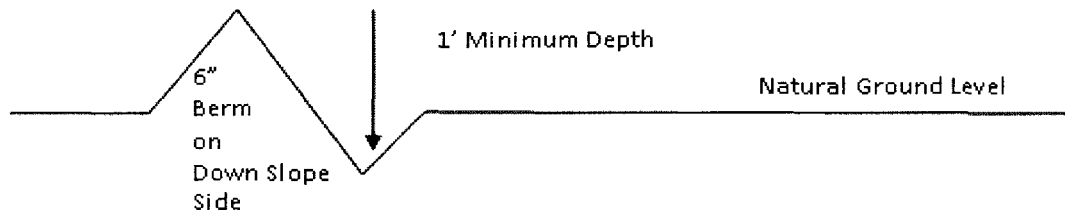
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outslowing and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

Cattle guards

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

Fence Requirement

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Construction Steps

1. Salvage topsoil
2. Construct road

3. Redistribute topsoil
4. Revegetate slopes

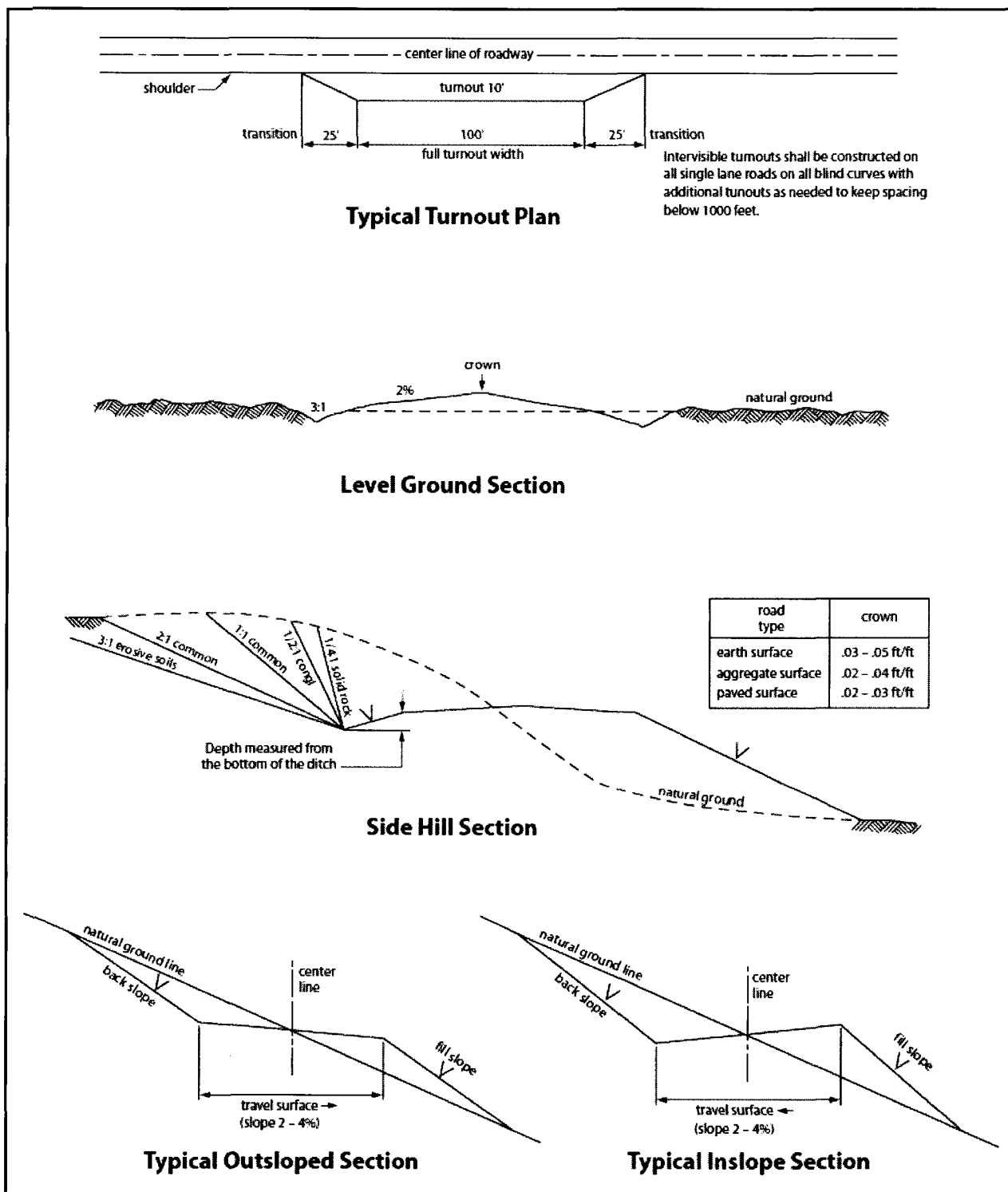


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Exclosure Netting (Open-top Tanks)

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

Chemical and Fuel Secondary Containment and Exclosure Screening

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

Open-Vent Exhaust Stack Exclosures

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

Containment Structures

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

B. PIPELINES

BURIED PIPELINE STIPULATIONS

A copy of the application (Grant, APD, or Sundry Notice) and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to

the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.

5. All construction and maintenance activity will be confined to the authorized right-of-way.

6. The pipeline will be buried with a minimum cover of 36 inches between the top of the pipe and ground level.

7. The maximum allowable disturbance for construction in this right-of-way will be 30 feet:

- Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed 20 feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation.*)
- Clearing of brush species within the right-of-way will be allowed: maximum width of clearing operations will not exceed 30 feet. The trench and bladed area are included in this area. (*Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.*)
- The remaining area of the right-of-way (if any) shall only be disturbed by compressing the vegetation. (*Compressing can be caused by vehicle tires, placement of equipment, etc.*)

8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately 6 inches in depth. The topsoil will be

segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

9. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire right-of-way shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted and a 6 inch berm will be left over the ditch line to allow for settling back to grade.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

<input checked="" type="checkbox"/> seed mixture 1	<input type="checkbox"/> seed mixture 3
<input type="checkbox"/> seed mixture 2	<input type="checkbox"/> seed mixture 4
<input type="checkbox"/> seed mixture 2/LPC	<input type="checkbox"/> Aplomado Falcon Mixture

13. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2.

14. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.

15. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder before maintenance begins. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the holder to construct temporary deterrence structures.

16. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

17. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes associated roads, pipeline corridor and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

18. Escape Ramps - The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:

- a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them at least 100 yards from the trench.
- b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench.

C. ELECTRIC LINES

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

A copy of the grant and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.
5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006 . The holder shall assume the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.

6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Special Stipulations:

- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.

VIII. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

IX. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Seed Mixture 1 for Loamy Sites

Holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed shall be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed shall be planted using a drill equipped with a depth regulator to ensure proper depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture shall be evenly and uniformly planted over the disturbed area (small/heavier seeds have a tendency to drop the bottom of the drill and are planted first). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed shall be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre shall be doubled. The seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains lovegrass (<i>Eragrostis intermedia</i>)	0.5
Sand dropseed (<i>Sporobolus cryptandrus</i>)	1.0
Sideoats grama (<i>Bouteloua curtipendula</i>)	5.0
Plains bristlegrass (<i>Setaria macrostachya</i>)	2.0

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed



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

Operator Certification Data Report

12/21/2017

Operator Certification

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

NAME: Brian Wood

Signed on: 03/27/2017

Title: President

Street Address: 37 Verano Loop

City: Santa Fe

State: NM

Zip: 87508

Phone: (505)466-8120

Email address: afmss@permitswest.com

Field Representative

Representative Name: SAM PRYOR

Street Address: 5400 LBJ FREEWAY, SUITE 1500

City: DALLAS

State: TX

Zip: 75240

Phone: (972)371-5241

Email address:



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

Application Data Report

12/21/2017

APD ID: 10400012448

Submission Date: 03/27/2017

Highlighted data
reflects the most
recent changes

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - General

APD ID: 10400012448

Tie to previous NOS?

Submission Date: 03/27/2017

BLM Office: CARLSBAD

User: Brian Wood

Title: President

Federal/Indian APD: FED

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

Lease number: NMNM117115

Lease Acres: 640

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? NO

Permitting Agent? YES

APD Operator: MATADOR PRODUCTION COMPANY

Operator letter of designation: Warren_121H_Operator_Designation_03-27-2017.pdf

Operator Info

Operator Organization Name: MATADOR PRODUCTION COMPANY

Operator Address: 5400 LBJ Freeway, Suite 1500

Zip: 75240

Operator PO Box:

Operator City: Dallas

State: TX

Operator Phone: (972)371-5200

Operator Internet Address: amonroe@matadorresources.com

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: WARREN FED COM

Well Number: 121H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: CASS DRAW

Pool Name: BONE SPRING

Is the proposed well in an area containing other mineral resources? USEABLE WATER,NATURAL GAS,OIL

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

Describe other minerals:

Is the proposed well in a Helium production area? N

Use Existing Well Pad? NO

New surface disturbance?

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name:

Number: 1

WARREN SLOT

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: 3 Miles

Distance to nearest well: 0 FT

Distance to lease line: 170 FT

Reservoir well spacing assigned acres Measurement: 160 Acres

Well plat: Warren_121H_Plat_03-20-2017.pdf

Well work start Date: 06/01/2017

Duration: 90 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NAVD88

Survey number: 18329

	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
SHL Leg #1	170	FNL	770	FWL	23S	27E	25	Aliquot NWN W	32.28294 24	- 104.1499 45	EDD Y	NEW MEXI CO	NEW MEXI CO	F	FEE	313 3	0	0
KOP Leg #1	170	FNL	770	FWL	23S	27E	25	Aliquot NWN W	32.28294 24	- 104.1499 45	EDD Y	NEW MEXI CO	NEW MEXI CO	F	FEE	233 3	800	800
PPP Leg #1	264 0	FNL	715	FWL	23S	27E	25	Aliquot NWS W	32.27604 09	- 104.1502 993	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 117115	- 441 7	998 1	755 0

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

	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
EXIT Leg #1	240	FSL	660	FWL	23S	27E	25	Aliquot SWS W	32.26933 15	- 104.1502 974	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 117115	- 441 7	123 81	755 0
BHL Leg #1	240	FSL	660	FWL	23S	27E	25	Aliquot SWS W	32.26933 15	- 104.1502 974	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 117115	- 441 7	123 81	755 0

Matador Production Company
Warren Fed Com 121H
SHL 170' FNL & 770' FWL Sec. 25
BHL 240' FSL & 660' FWL Sec. 25
T. 23 S., R. 27 E., Eddy County, NM

DRILL PLAN PAGE 5

mud/gas separator where gas will be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used.

8. OTHER INFORMATION

Anticipated spud date is upon approval. It is expected it will take \approx 3 months to drill and complete the well.

Matador Production Company owns the majority working interest in this well. Per its discussions with its potential partners, Matador will be named operator upon execution of the final Operating Agreements signed by the partners or the issuance of a pooling order by the State.

SCALE: 1" = 1000'

0' 500' 1000'



SECTION 25, TOWNSHIP 23-S, RANGE 27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

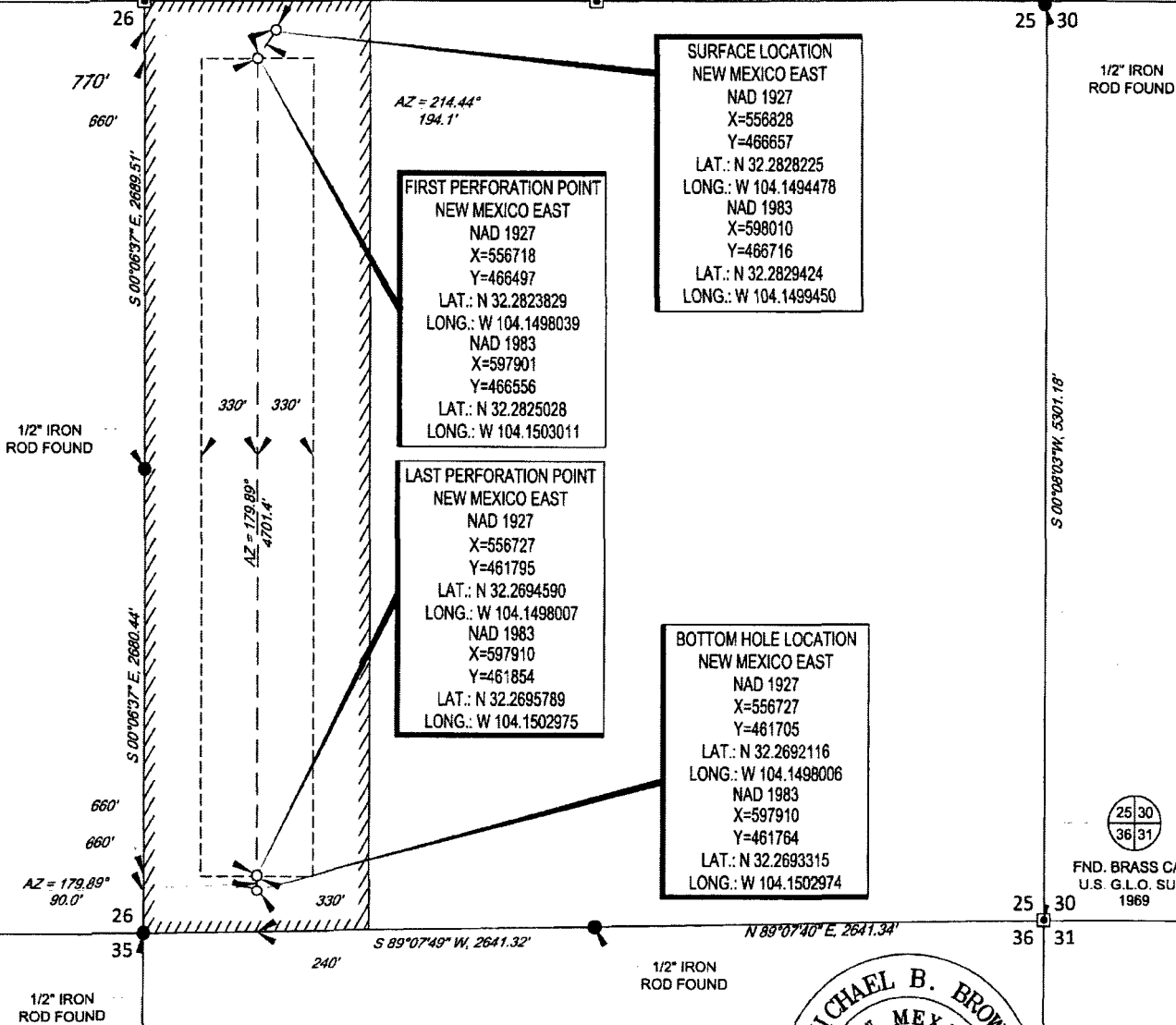
FND. BRASS CAP.
U.S. G.L.O. SUR.
1969



23 24
26 25
FND. BRASS CAP.
U.S. G.L.O. SUR.
1969

24
25

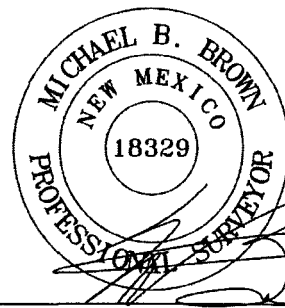
24 19
25 30



LEASE NAME & WELL NO.: WARREN FED #121H
SECTION 25 TWP 23-S RGE 27-E SURVEY N.M.P.M.
COUNTY EDDY STATE NM
DESCRIPTION 170' FNL & 770' FWL

DISTANCE & DIRECTION
FROM INT. OF US-285 & W. CEDAR ST., GO SOUTH ON US-285/SOUTH 8TH ST ±1.0 MILES, THENCE SOUTHWEST (RIGHT) ON HIGBY HOLE RD. ±0.4 MILES, THENCE WEST (RIGHT) ON BOUNDS RD. ±2.9 MILES TO A POINT ±1900 FEET SOUTH OF THE LOCATION.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE OF THE NORTH AMERICAN DATUM 1927, U.S. SURVEY FEET. THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS THOSE FOR THIS TRANSACTION ONLY.
AS OF THE DATE OF SURVEY, ALL ABOVE GROUND APPURTENANCES WITHIN 300' OF THE STAKED LOCATION ARE SHOWN HEREON.



Michael Blake Brown, P.S. No. 18329
DECEMBER 6, 2016

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7548
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM



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

Drilling Plan Data Report

12/21/2017

APD ID: 10400012448

Submission Date: 03/27/2017

Highlighted data
reflects the most
recent changes

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	---	3133	0	0	OTHER : Quaternary (Caliche)	USEABLE WATER	No
2	SALADO	2633	500	500	SALT	OTHER : Salt	No
3	CASTILE	2374	759	759	ANHYDRITE	NONE	No
4	LAMAR	790	2343	2345	LIMESTONE	NONE	No
5	BELL CANYON	725	2408	2409	SANDSTONE	NONE	No
6	CHERRY CANYON	-26	3159	3162	SANDSTONE	NATURAL GAS,OIL	No
7	BRUSHY CANYON	-1203	4336	4338	SANDSTONE	NATURAL GAS,OIL	No
8	BONE SPRING LIME	-2695	5828	5830	LIMESTONE	NATURAL GAS,OIL	No
9	BONE SPRING 1ST	-3364	6497	6503	OTHER : Carbonate	NATURAL GAS,OIL	No
10	BONE SPRING 1ST	-3734	6867	6871	SANDSTONE	NATURAL GAS,OIL	No
11	BONE SPRING 2ND	-3936	7069	7073	OTHER : Carbonate	NATURAL GAS,OIL	No
12	BONE SPRING 2ND	-4382	7515	7680	SANDSTONE	NATURAL GAS,OIL	Yes

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 10000

Equipment: A 5K BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and 1 annular preventer will be installed. The BOP will be used below surface casing to TD. See attached BOP and choke manifold diagrams. An accumulator complying with Onshore Order 2 requirements for the BOP stack pressure rating will be present. Rotating head will be installed as needed.

Requesting Variance? YES

Variance request: Matador requests a variance to use a speed head. Speed head diameter range is 13.375" x 9.625" x 5.5" x 2.875". Matador requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. If the specific hose is not

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

available, then one of equal or higher rating will be used.

Testing Procedure: Pressure tests will be conducted before drilling out from under all casing strings. BOP will be inspected and operated as required by Onshore Order 2. Kelly cock and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position. A third party company will test the BOPs. After surface casing is set and the BOP is nipped up, then the BOP pressure tests will be made to 250 psi low and 2000 psi high. Intermediate pressure tests will be made to 250 psi low and 3000 psi high. Annular preventer will be tested to 250 psi low and 1000 psi high on the surface casing, and 250 psi low and 2500 psi high on the intermediate casing. In the case of running a speed head with landing mandrel for 9.625" casing, after surface casing is set, BOP test pressures will be 250 psi low and 3000 psi high. Annular will be tested to 250 psi low and 2500 psi high. Wellhead seals will be tested to 5000 psi once the 9.625" casing has been landed and cemented.

Choke Diagram Attachment:

Warren_121H_Choke_03-27-2017.pdf

BOP Diagram Attachment:

Warren_121H_APD_BOP_03-27-2017.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	475	0	475	3133	2658	475	J-55	54.5	OTHER - BTC	1.125	1.125	DRY	1.8	DRY	1.8
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	2450	0	2446	3133	687	2450	J-55	40	OTHER - BTC	1.125	1.125	DRY	1.8	DRY	1.8
3	PRODUCTION	8.75	5.5	NEW	API	N	0	12381	0	7550	3133	-4417	12381	P-110	20	OTHER - BTC/TXP	1.125	1.125	DRY	1.8	DRY	1.8

Casing Attachments

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Warren_121H_Casing_Assumption_Worksheet_03-27-2017.pdf

Casing ID: 2 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Warren_121H_Casing_Assumption_Worksheet_03-27-2017.pdf

Casing ID: 3 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Warren_121H_Casing_Assumption_Worksheet_03-27-2017.pdf

Section 4 - Cement

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	475	100	1.82	12.8	182	100	CLASS C	BENTONITE + 2% CACL2 + 3% NACL +LCM
SURFACE	Tail		0	475	350	1.38	14.8	483	100	CLASS C	5% NaCl + LCM
INTERMEDIATE	Lead		0	2450	510	2.13	12.6	1086	100	CLASS C	BENTONITE + 1% CACL2 + 8% NACL + LCM
INTERMEDIATE	Tail		0	2450	270	1.38	14.8	372	100	CLASS C	5% NaCl + LCM
PRODUCTION	Lead		1400	1238 1	830	2.35	11.5	1950	35	TXI	FLUID LOSS + DISPERSANT + RETARDER + LCM
PRODUCTION	Tail		1400	1238 1	1450	1.39	13.2	2015	35	TXI	FLUID LOSS + DISPERSANT + RETARDER + LCM

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: All necessary mud products (barite, bentonite, LCM) for weight addition and fluid loss control will be on location at all times.

Describe the mud monitoring system utilized: An electronic Pason mud monitoring system complying with Onshore Order 1 will be used.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	475	OTHER : FRESH WATER SPUD	8.3	8.3							

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
2450	1238 1	OTHER : FRESH WATER AND CUT BRINE	9	9							
475	2450	OTHER : BRINE WATER	10	10							

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

No core or drill stem test is planned.

A 2-person mud-logging program will be used from 5600' to TD.

No electric logs are planned at this time. GR will be collected through the MWD tools from intermediate casing to TD. CBL with CCL will be run as far as gravity will let it fall to TOC.

List of open and cased hole logs run in the well:

CBL,GR,OTH

Other log type(s):

CCL

Coring operation description for the well:

NO CORING OPERATION

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4000

Anticipated Surface Pressure: 2339

Anticipated Bottom Hole Temperature(F): 140

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geohazards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

Warren_121H_H2S_Plan_03-27-2017.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Warren_121H_Horizontal_Drilling_Plan_03-27-2017.pdf

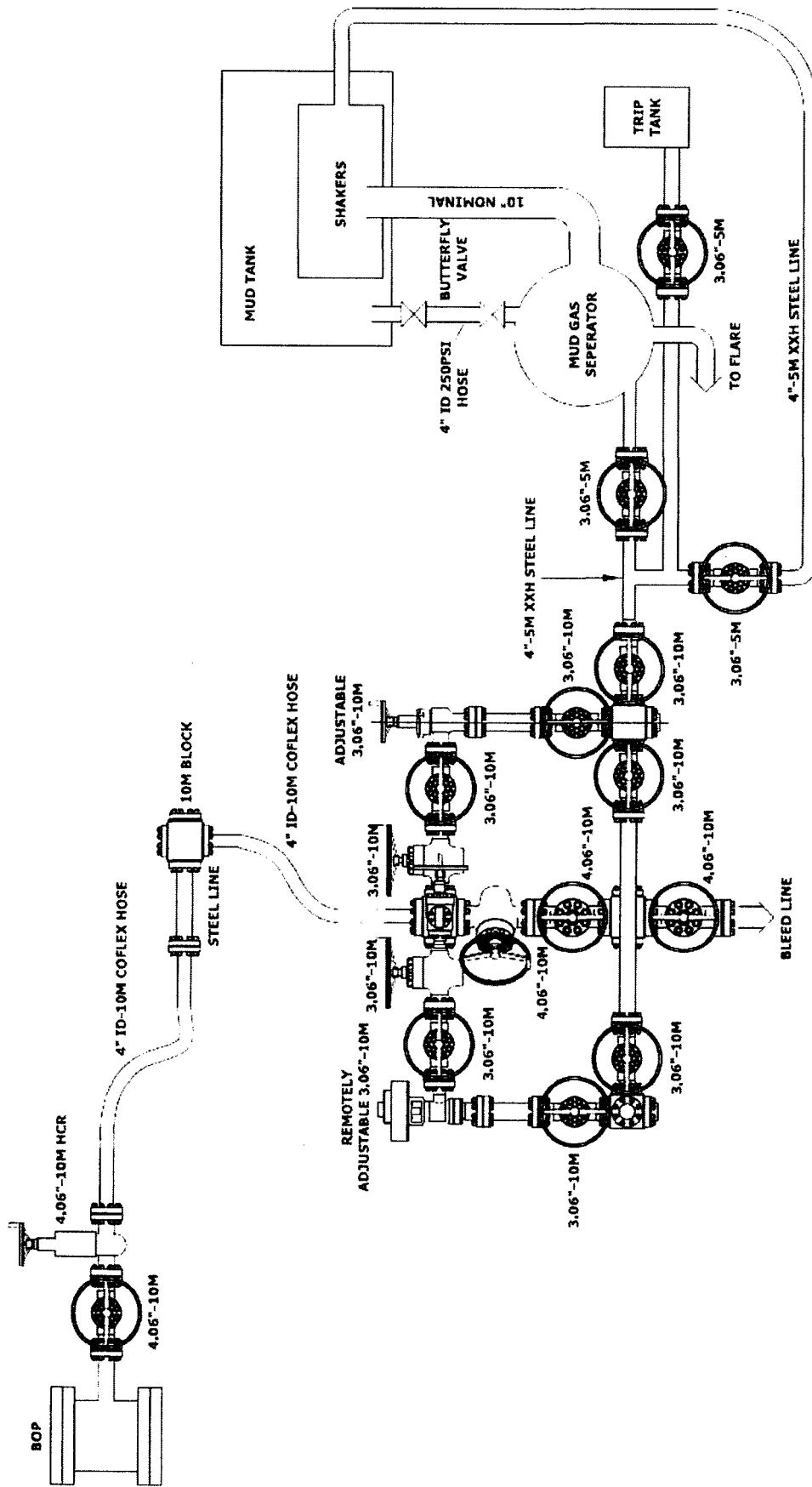
Other proposed operations facets description:

Other proposed operations facets attachment:

Warren_121H_General_Drilling_Plan_03-27-2017.pdf

Warren_201H_Wellhead_Casing_Spec_07-18-2017.pdf

Other Variance attachment:



WELDED BY: [Signature]
 DATE: [Date]
 CHECKED BY: [Signature]
 DATE: [Date]
 APPROVED BY: [Signature]
 DATE: [Date]

Copyright 2014
 PATTERSON-UTI
 DRILLING COMPANY LLC
 CONFIDENTIAL AND PROPRIETARY
 NOT TO BE DISTRIBUTED

PATTERSON-UTI
 DRILLING COMPANY LLC
 CHOKE MANIFOLD
 90M CHOKE ASSEMBLY
 RIC 227
 R0297-D.001.LAY.09

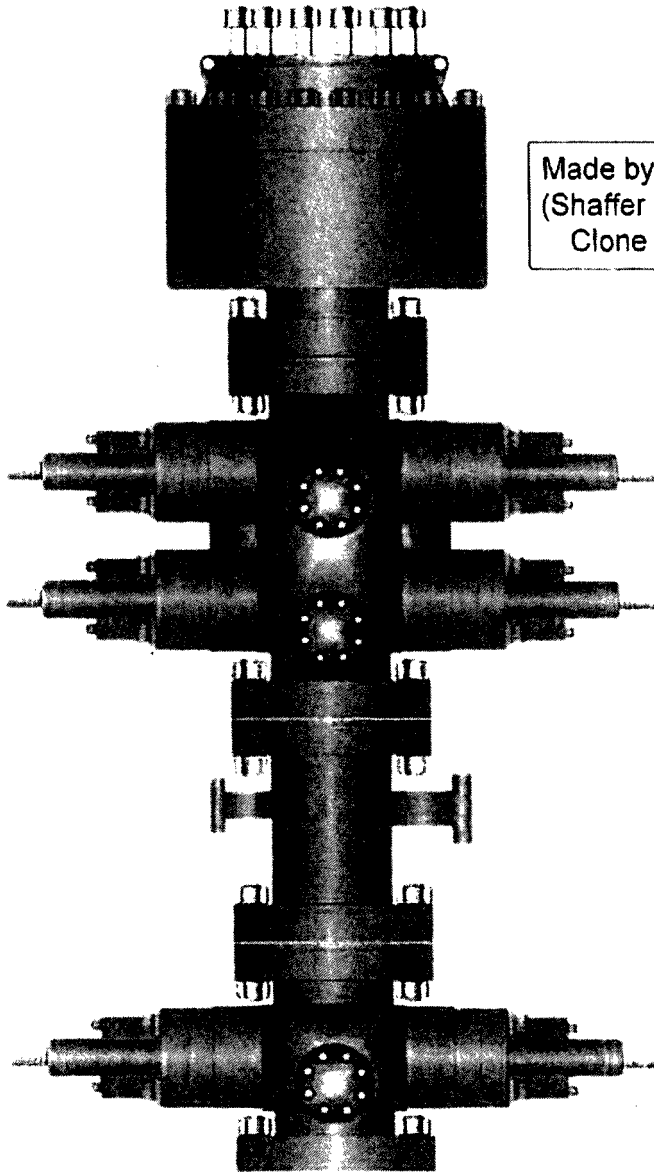


PATTERSON-UTI

Well Control

RIG:

297



Made by Cameron
(Shaffer Spherical)
Clone Annular

PATTERSON-UTI # PS2-628

STYLE: New Shaffer Spherical

BORE 13 5/8" PRESSURE 5,000

HEIGHT: 48 1/2" WEIGHT: 13,800 lbs

PATTERSON-UTI # PC2-128

STYLE: New Cameron Type U

BORE 13 5/8" PRESSURE 10,000

RAMS: TOP 5" Pipe BTM Blinds

HEIGHT: 66 5/8" WEIGHT: 24,000 lbs

Length 40" Outlets 4" 10M

DSA 4" 10M x 2" 10M

PATTERSON-UTI # PC2-228

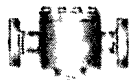
STYLE: New Cameron Type U

BORE 13 5/8" PRESSURE 10,000

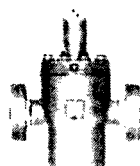
RAMS: 5" Pipe

HEIGHT: 41 5/8" WEIGHT: 13,000 lbs

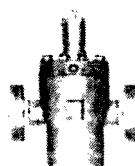
WING VALVES



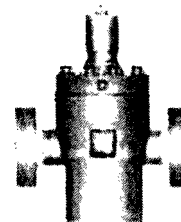
2" Check Valve



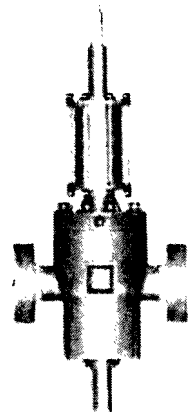
2" Manual Valve



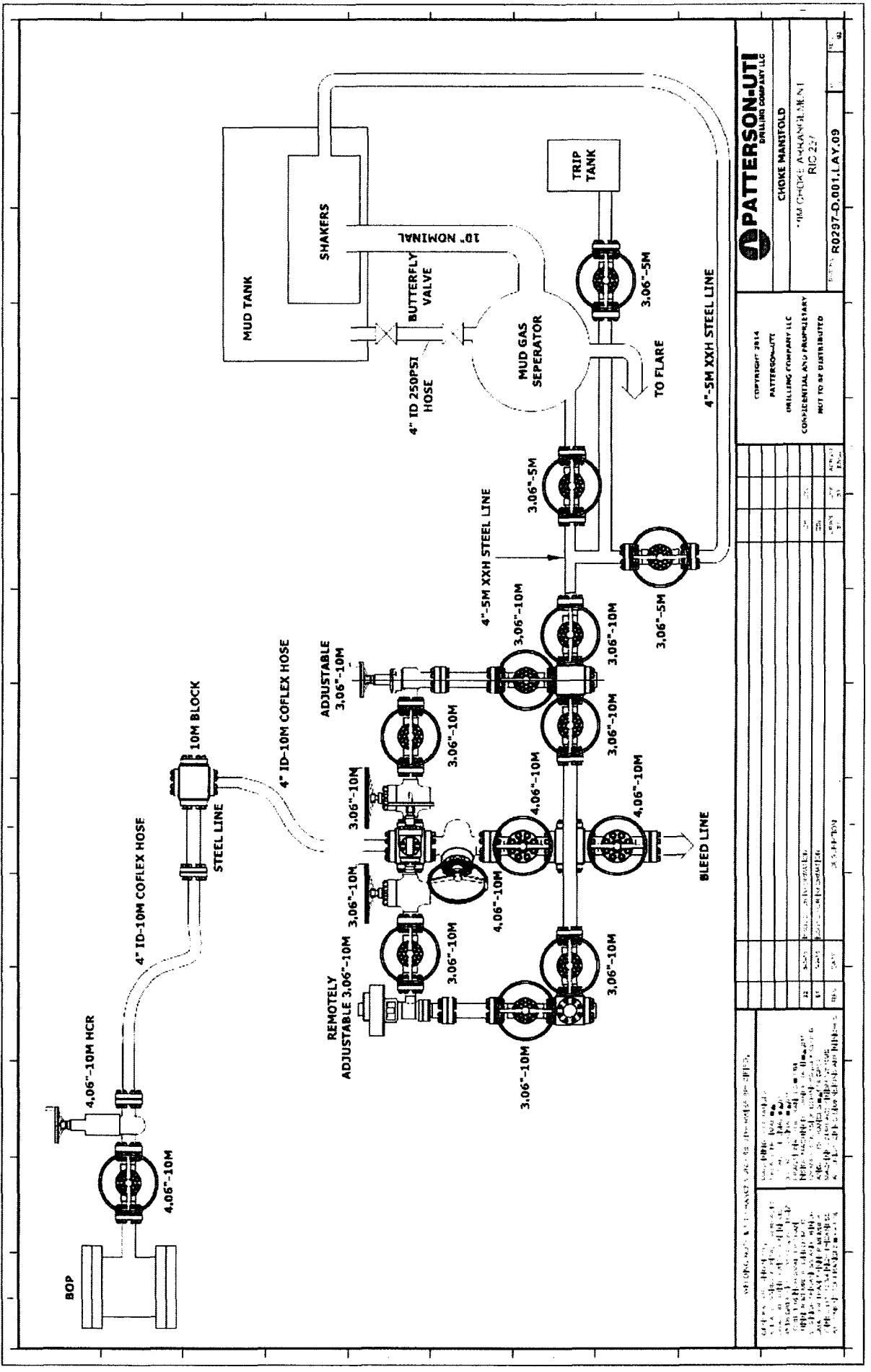
2" Manual Valve



4" Manual Valve



4" Hydraulic Valve



PATTERSON-UTI
DRILLING COMPANY LLC

CHOKE MANIFOLD
*OLD CHOKE ARRANGEMENT
RIC 227

FIG. NO. R0297-D-001 LAY.09

Copyright 2014
PATTERSON-UTI
DRILLING COMPANY LLC
CONFIDENTIAL AND PROPRIETARY
NOT TO BE DISTRIBUTED

NO.	DATE	BY	CHKD	APP'D	REV.	DESCRIPTION
1	01/14/14	J. J. J.				ISSUED FOR CONSTRUCTION
2	01/14/14	J. J. J.				REVISION
3	01/14/14	J. J. J.				REVISION
4	01/14/14	J. J. J.				REVISION
5	01/14/14	J. J. J.				REVISION
6	01/14/14	J. J. J.				REVISION
7	01/14/14	J. J. J.				REVISION
8	01/14/14	J. J. J.				REVISION
9	01/14/14	J. J. J.				REVISION
10	01/14/14	J. J. J.				REVISION
11	01/14/14	J. J. J.				REVISION
12	01/14/14	J. J. J.				REVISION
13	01/14/14	J. J. J.				REVISION
14	01/14/14	J. J. J.				REVISION
15	01/14/14	J. J. J.				REVISION
16	01/14/14	J. J. J.				REVISION
17	01/14/14	J. J. J.				REVISION
18	01/14/14	J. J. J.				REVISION
19	01/14/14	J. J. J.				REVISION
20	01/14/14	J. J. J.				REVISION
21	01/14/14	J. J. J.				REVISION
22	01/14/14	J. J. J.				REVISION
23	01/14/14	J. J. J.				REVISION
24	01/14/14	J. J. J.				REVISION
25	01/14/14	J. J. J.				REVISION
26	01/14/14	J. J. J.				REVISION
27	01/14/14	J. J. J.				REVISION
28	01/14/14	J. J. J.				REVISION
29	01/14/14	J. J. J.				REVISION
30	01/14/14	J. J. J.				REVISION
31	01/14/14	J. J. J.				REVISION
32	01/14/14	J. J. J.				REVISION
33	01/14/14	J. J. J.				REVISION
34	01/14/14	J. J. J.				REVISION
35	01/14/14	J. J. J.				REVISION
36	01/14/14	J. J. J.				REVISION
37	01/14/14	J. J. J.				REVISION
38	01/14/14	J. J. J.				REVISION
39	01/14/14	J. J. J.				REVISION
40	01/14/14	J. J. J.				REVISION
41	01/14/14	J. J. J.				REVISION
42	01/14/14	J. J. J.				REVISION
43	01/14/14	J. J. J.				REVISION
44	01/14/14	J. J. J.				REVISION
45	01/14/14	J. J. J.				REVISION
46	01/14/14	J. J. J.				REVISION
47	01/14/14	J. J. J.				REVISION
48	01/14/14	J. J. J.				REVISION
49	01/14/14	J. J. J.				REVISION
50	01/14/14	J. J. J.				REVISION

Internal Hydrostatic Test Graph



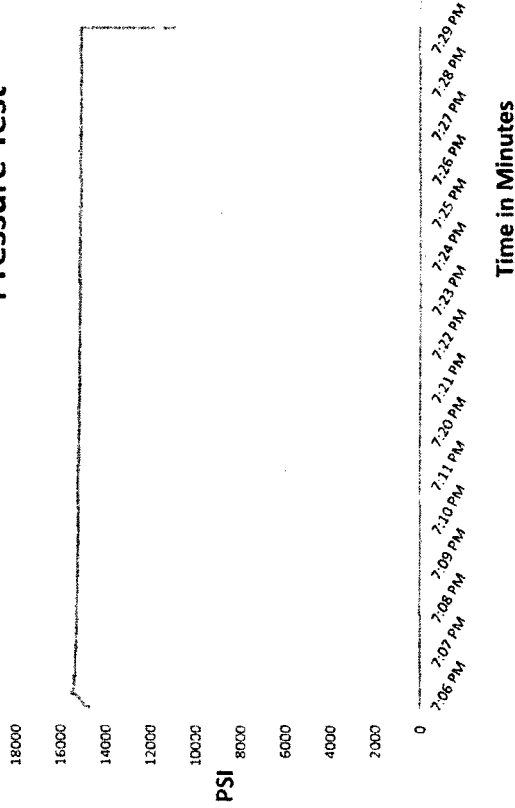
Midwest Hose
& Specialty, Inc.

Customer: Patterson

Pick Ticket #: 284918

Hose Specifications				Verification	
Hose Type	Ck	Length	10'	Type of Fitting	4-1/16 10K
I.D.	3"	O.D.	4.79"	Die Size	5.37"
Working Pressure	10000 PSI	Burst Pressure	Standard Safety Multiplier Applies	Coupling Method	Swage
				Final O.D.	5.37"
				Hose Serial #	10490
				Hose Assembly Serial #	284918-2

Pressure Test



Test Pressure	15000 PSI	Time Held at Test Pressure	15 2/4 Minutes	Actual Burst Pressure		Peak Pressure	15732 PSI
----------------------	-----------	-----------------------------------	----------------	------------------------------	--	----------------------	-----------

Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: Tyler Hill

Approved By: Ryan Adams

[Signature: Tyler Hill]

[Signature: Ryan Adams]



Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Certificate

General Information		Hose Specifications	
Customer	PATTERSON B&E	Hose Assembly Type	Choke & Kill
MWH Sales Representative	AMY WHITE	Certification	API 7K
Date Assembled	12/8/2014	Hose Grade	MUD
Location Assembled	OKC	Hose Working Pressure	10000
Sales Order #	236404	Hose Lot # and Date Code	10490-01/13
Customer Purchase Order #	260471	Hose I.D. (Inches)	3"
Assembly Serial # (Pick Ticket #)	287918-2	Hose O.D. (Inches)	5.30"
Hose Assembly Length	10'	Aarmor (yes/no)	YES
Fittings			
End A		End B	
Stem (Part and Revision #)	R3.0X64WB	Stem (Part and Revision #)	R3.0X64WB
Stem (Heat #)	91996	Stem (Heat #)	91996
Ferrule (Part and Revision #)	RF3.0	Ferrule (Part and Revision #)	RF3.0
Ferrule (Heat #)	37DA5631	Ferrule (Heat #)	37DA5631
Connection (Part #)	4 1/16 10K	Connection (Part #)	4 1/16 10K
Connection (Heat #)		Connection (Heat #)	
Dies Used	5.37	Dies Used	5.37
Hydrostatic Test Requirements			
Test Pressure (psi)	15,000	Hose assembly was tested with ambient water temperature.	
Test Pressure Hold Time (minutes)	15 1/2		
Date Tested	Tested By		Approved By
12/8/2014			



Midwest Hose
& Specialty, Inc.

Certificate of Conformity

Customer: PATTERSON B&E

Customer P.O.# 260471

Sales Order # 236404

Date Assembled: 12/8/2014

Specifications

Hose Assembly Type: Choke & Kill

Assembly Serial # 287918-2

Hose Lot # and Date Code 10490-01/13

Hose Working Pressure (psi) 10000

Test Pressure (psi) 15000

We hereby certify that the above material supplied for the referenced purchase order to be true according to the requirements of the purchase order and current industry standards.

Supplier:

Midwest Hose & Specialty, Inc.

3312 S I-35 Service Rd

Oklahoma City, OK 73129

Comments:

Approved By

Date

12/9/2014



Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Graph

December 9, 2014

Customer: Patterson

Pick Ticket #: 284918

22918

Hose Specifications

Hose Type
CK
LD
3"
Working Pressure
10000 PSI
Standard Safety Multiplier Applies

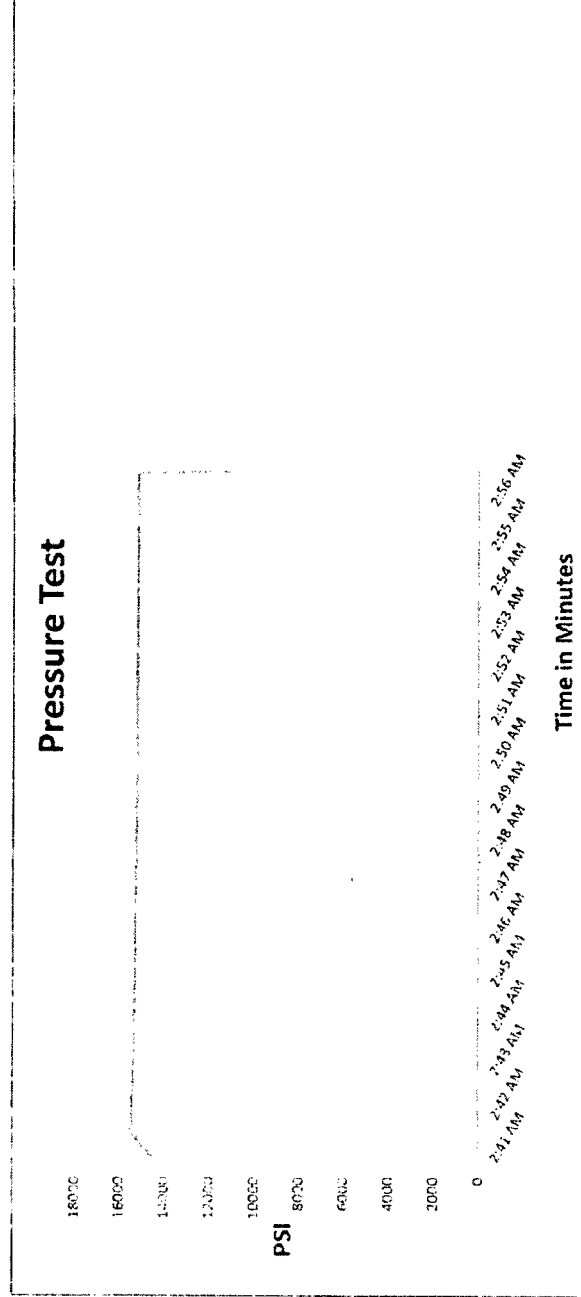
Length
20'
O.D.
4.77"

Type of Fitting
4-1/16 10K
Die Size
5.37"
Hose Serial #
10490

Verification

Coupling Method
Swage
Final O.D.
5.40"
Hose Assembly Serial #
284918-1

Pressure Test



Test Pressure
15000 PSI

Time Held at Test Pressure
15 2/4 Minutes

Actual Burst Pressure

Peak Pressure
15893 PSI

Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: Tyler Hill

Approved By: Ryan Adams

TH

RA



Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Certificate

General Information		Hose Specifications	
Customer	PATTERSON B&E	Hose Assembly Type	Choke & Kill
MWH Sales Representative	AMY WHITE	Certification	API 7K
Date Assembled	12/8/2014	Hose Grade	MUD
Location Assembled	OKC	Hose Working Pressure	10000
Sales Order #	236404	Hose Lot # and Date Code	10490-01/13
Customer Purchase Order #	260471	Hose I.D. (Inches)	3"
Assembly Serial # (Pick Ticket #)	287918-1	Hose O.D. (Inches)	5.30"
Hose Assembly Length	20'	Armor (yes/no)	YES
Fittings			
End A		End B	
Stem (Part and Revision #)	R3.0X64WB	Stem (Part and Revision #)	R3.0X64WB
Stem (Heat #)	A141420	Stem (Heat #)	A141420
Ferrule (Part and Revision #)	RF3.0	Ferrule (Part and Revision #)	RF3.0
Ferrule (Heat #)	37DA5631	Ferrule (Heat #)	37DA5631
Connection (Part #)	4 1/16 10K	Connection (Part #)	4 1/16 10K
Connection (Heat #)	V3579	Connection (Heat #)	V3579
Dies Used	5.37	Dies Used	5.37
Hydrostatic Test Requirements			
Test Pressure (psi)	15,000	Hose assembly was tested with ambient water temperature.	
Test Pressure Hold Time (minutes)	15 1/2		
Date Tested	12/9/2014	Tested By	Approved By



Midwest Hose
& Specialty, Inc.

Certificate of Conformity

Customer: PATTERSON B&E

Customer P.O.# 260471

Sales Order # 236404

Date Assembled: 12/8/2014

Specifications

Hose Assembly Type: Choke & Kill

Assembly Serial # 287918-1

Hose Lot # and Date Code 10490-01/13

Hose Working Pressure (psi) 10000

Test Pressure (psi) 15000

We hereby certify that the above material supplied for the referenced purchase order to be true according to the requirements of the purchase order and current industry standards.

Supplier:

Midwest Hose & Specialty, Inc.

3312 S I-35 Service Rd

Oklahoma City, OK 73129

Comments:

Approved By

Date

12/9/2014

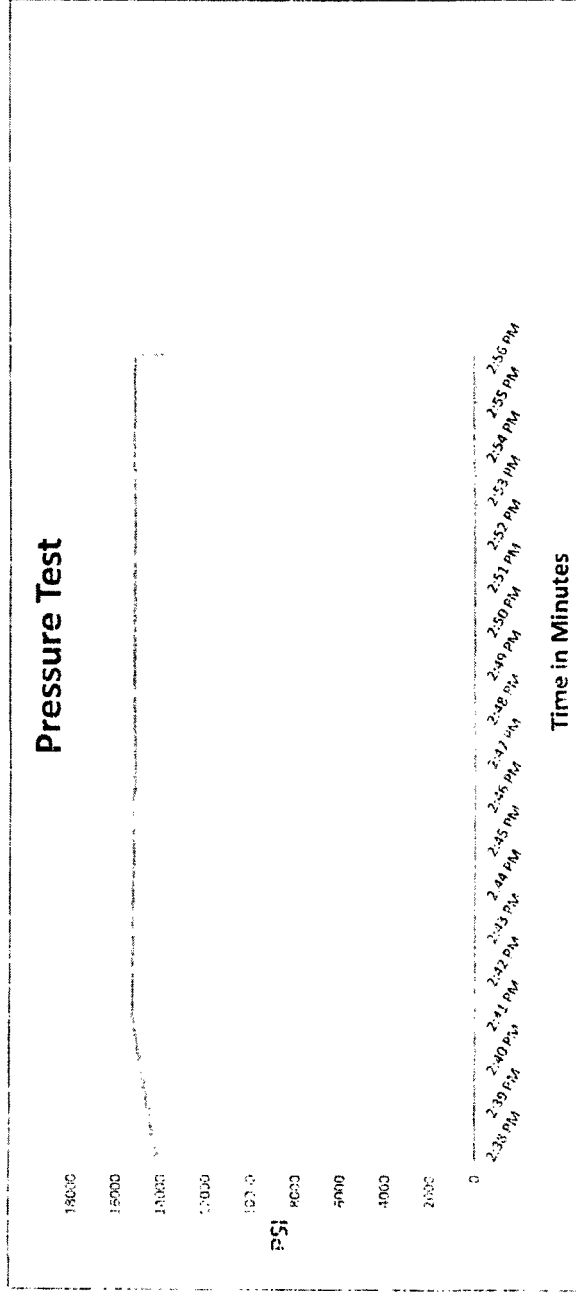
Internal Hydrostatic Test Graph



Midwest Hose
& Specialty, Inc.

Customer: Patterson Pick Ticket #: 284918

Hose Specifications		Verification	
Hose Type	Length	Type of Fitting	Coupling Method
Mud	70'	4 1/16 10K	Swage
I.D.	O.D.	Die Size	Final O.D.
3"	4.79"	5.37"	5.37"
Working Pressure	Burst Pressure	Hose Serial #	Hose Assembly Serial #
10000 PSI	Standard Safety Multiplier Applies	10190	284918-2



Test Pressure 15000 PSI Time Held at Test Pressure 16 3/4 Minutes Actual Burst Pressure 15410 PSI Peak Pressure 15410 PSI

Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: Tyler Hill

Approved By: Ryan Adams

[Signatures]



Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Certificate

General Information		Hose Specifications	
Customer	PATTERSON B&E	Hose Assembly Type	Choke & Kill
MWH Sales Representative	AMY WHITE	Certification	API 7K
Date Assembled	12/8/2014	Hose Grade	MUD
Location Assembled	OKC	Hose Working Pressure	10000
Sales Order #	236404	Hose Lot # and Date Code	10490-01/13
Customer Purchase Order #	260471	Hose I.D. (Inches)	3"
Assembly Serial # (Pick Ticket #)	287918-3	Hose O.D. (Inches)	5.23"
Hose Assembly Length	70'	Armor (yes/no)	YES
Fittings			
End A		End B	
Stem (Part and Revision #)	R3.0X64WB	Stem (Part and Revision #)	R3.0X64WB
Stem (Heat #)	A141420	Stem (Heat #)	A141420
Ferrule (Part and Revision #)	RF3.0	Ferrule (Part and Revision #)	RF3.0
Ferrule (Heat #)	37DA5631	Ferrule (Heat #)	37DA5631
Connection (Part #)	4 1/16 10K	Connection (Part #)	4 1/16 10K
Connection (Heat #)		Connection (Heat #)	
Dies Used	5.37	Dies Used	5.37
Hydrostatic Test Requirements			
Test Pressure (psi)	15,000	Hose assembly was tested with ambient water temperature.	
Test Pressure Hold Time (minutes)	16 3/4		
Date Tested	Tested By		Approved By
12/9/2014			



Midwest Hose
& Specialty, Inc.

Certificate of Conformity

Customer: **PATTERSON B&E**

Customer P.O.# **260471**

Sales Order # **236404**

Date Assembled: **12/8/2014**

Specifications

Hose Assembly Type: **Choke & Kill**

Assembly Serial # **287918-3**

Hose Lot # and Date Code **10490-01/13**

Hose Working Pressure (psi) **10000**

Test Pressure (psi) **15000**

We hereby certify that the above material supplied for the referenced purchase order to be true according to the requirements of the purchase order and current industry standards.

Supplier:

Midwest Hose & Specialty, Inc.

3312 S I-35 Service Rd

Oklahoma City, OK 73129

Comments:

Approved By

Date

12/9/2014

Casing Design Criteria and Load Case Assumptions

Surface Casing

Collapse: $DF_c=1.125$

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.43 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.52 psi/ft).

Burst: $DF_b=1.125$

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.43 psi/ft), which is a more conservative backup force than pore pressure.

Tensile: $DF_t=1.8$

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (8.3 ppg).

Intermediate #2 Casing

Collapse: $DF_c=1.125$

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.52 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst: $DF_b=1.125$

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure.
- Gas Kick Profile: Internal burst force at the shoe will be Fracture Pressure at that depth. Surface burst pressure will be fracture gradient at setting depth less a gas gradient to equivalent height of 50 bbl kick with Drill Pipe inside casing and mud gradient with which the next hole section will be run above that (0.47 psi/ft). External force will be equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure.
- Fracture at Shoe with 1/3 BHP at Surface: Internal burst force at the shoe will be Fracture Pressure at setting depth. Internal burst force at surface will be 1/3 of pore pressure at setting depth. External force will be equal to the mud gradient in which the casing will be run (0.52 psi/ft) which is a more conservative backup force than pore pressure.

Tensile: $DF_t=1.8$

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (10.0 ppg).

Production Casing

Collapse: $DF_c=1.125$

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.47 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and mud gradient in which the casing will be run above that (0.47 psi/ft) and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst: $DF_b=1.125$

- Pressure Test: 8000 psi casing test with an external force equal to the mud gradient in which the casing will be run (0.47 psi/ft), which is a more conservative backup force than pore pressure.
- Injection Down Casing: 9500 psi surface injection pressure plus an internal pressure gradient of 0.65 psi/ft with an external force equal to the mud gradient in which the casing will be run (0.47 psi/ft), which is a more conservative backup force than pore pressure.

Tensile: $DF_t=1.8$

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (9.0 ppg).

Casing Design Criteria and Load Case Assumptions

Surface Casing

Collapse: $DF_c=1.125$

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.43 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.52 psi/ft).

Burst: $DF_b=1.125$

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.43 psi/ft), which is a more conservative backup force than pore pressure.

Tensile: $DF_t=1.8$

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (8.3 ppg).

Intermediate #2 Casing

Collapse: $DF_c=1.125$

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.52 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst: $DF_b=1.125$

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure.
- Gas Kick Profile: Internal burst force at the shoe will be Fracture Pressure at that depth. Surface burst pressure will be fracture gradient at setting depth less a gas gradient to equivalent height of 50 bbl kick with Drill Pipe inside casing and mud gradient with which the next hole section will be run above that (0.47 psi/ft). External force will be equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure.
- Fracture at Shoe with 1/3 BHP at Surface: Internal burst force at the shoe will be Fracture Pressure at setting depth. Internal burst force at surface will be 1/3 of pore pressure at setting depth. External force will be equal to the mud gradient in which the casing will be run (0.52 psi/ft) which is a more conservative backup force than pore pressure.

Tensile: $DF_t=1.8$

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (10.0 ppg).

Production Casing

Collapse: $DF_c=1.125$

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.47 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and mud gradient in which the casing will be run above that (0.47 psi/ft) and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst: $DF_b=1.125$

- Pressure Test: 8000 psi casing test with an external force equal to the mud gradient in which the casing will be run (0.47 psi/ft), which is a more conservative backup force than pore pressure.
- Injection Down Casing: 9500 psi surface injection pressure plus an internal pressure gradient of 0.65 psi/ft with an external force equal to the mud gradient in which the casing will be run (0.47 psi/ft), which is a more conservative backup force than pore pressure.

Tensile: $DF_t=1.8$

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (9.0 ppg).

Casing Design Criteria and Load Case Assumptions

Surface Casing

Collapse: $DF_c=1.125$

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.43 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.52 psi/ft).

Burst: $DF_b=1.125$

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.43 psi/ft), which is a more conservative backup force than pore pressure.

Tensile: $DF_t=1.8$

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (8.3 ppg).

Intermediate #2 Casing

Collapse: $DF_c=1.125$

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.52 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst: $DF_b=1.125$

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure.
- Gas Kick Profile: Internal burst force at the shoe will be Fracture Pressure at that depth. Surface burst pressure will be fracture gradient at setting depth less a gas gradient to equivalent height of 50 bbl kick with Drill Pipe inside casing and mud gradient with which the next hole section will be run above that (0.47 psi/ft). External force will be equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure.
- Fracture at Shoe with 1/3 BHP at Surface: Internal burst force at the shoe will be Fracture Pressure at setting depth. Internal burst force at surface will be 1/3 of pore pressure at setting depth. External force will be equal to the mud gradient in which the casing will be run (0.52 psi/ft) which is a more conservative backup force than pore pressure.

Tensile: $DF_t=1.8$

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (10.0 ppg).

Production Casing

Collapse: $DF_c=1.125$

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.47 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and mud gradient in which the casing will be run above that (0.47 psi/ft) and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst: $DF_b=1.125$

- Pressure Test: 8000 psi casing test with an external force equal to the mud gradient in which the casing will be run (0.47 psi/ft), which is a more conservative backup force than pore pressure.
- Injection Down Casing: 9500 psi surface injection pressure plus an internal pressure gradient of 0.65 psi/ft with an external force equal to the mud gradient in which the casing will be run (0.47 psi/ft), which is a more conservative backup force than pore pressure.

Tensile: $DF_t=1.8$

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (9.0 ppg).



Hydrogen Sulfide Drilling

Operations Plan

Matador Resources

1 H2S safety instructions to the following:

- Characteristics of H2S
- Physical effects and hazards
- Principal and operation of H2S detectors, warning system, and briefing areas
- Evacuation procedures, routes, and first aid
- Proper use of safety equipment & life support systems
- Essential personnel meeting medical evaluation criteria will receive additional training on the proper use of 30-minute pressure demand air packs.

2 H2S Detection and Alarm Systems:

- H2S sensor/detectors to be located on the drilling rig floor, in the base of the sub structure / cellar area, on the mud pits in the shale shaker area. Additional H2S detectors may be placed as deemed necessary.
- An audio alarm system will be installed on the derrick floor and in the doghouse.

3 Windssocks and / Wind Streamers:

- Windssocks at mud pit area should be high enough to be visible.
- Windssock on the rig floor and / top of doghouse should be high enough to be visible.

4 Condition Flags and Signs:

- Warning sign on access road to location
- Flags to be displayed on sign at entrance to location
 - Green Flag – Normal Safe Operation Condition
 - Yellow Flag – Potential Pressure and Danger
 - Red Flag – Danger (H2S present in dangerous concentrations) Only H2S trained personnel admitted on location

5 Well Control Equipment:

- See APD

6 Communications:

- While working under masks, chalkboards will be used for communications.
- Hand signals will be used where chalkboard is inappropriate.
- Two-way radio will be used to communicate off location in case emergency help is required. In most cases, cellular telephones will be available at most drilling foreman's trailer or living quarters.



7 Drilling Stem Testing:

- No DSTs or cores are planned at this time

8 Drilling contractor supervisor will be familiar with the effects H₂S has on tubulars good and other mechanical equipment.

9 If H₂S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H₂S scavengers if necessary.

11 Emergency Contacts

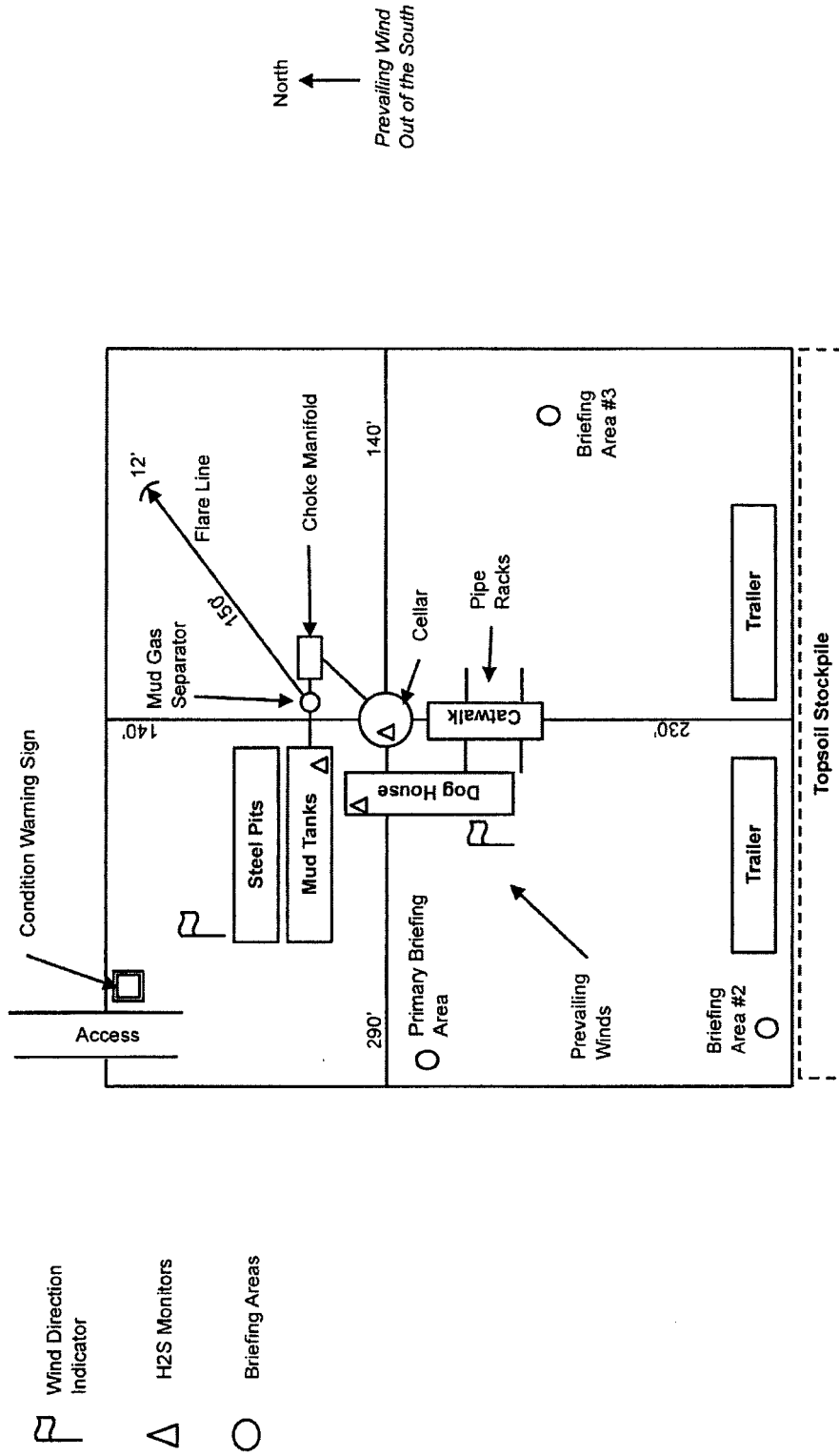
- See next page

H2S Contingency Plan Emergency Contacts
Matador Production Company
Warren Fed Com 25-23s-27e wells, Eddy County, NM

<u>Company Office</u>			
Matador Production Company		(972)-371-5200	
<u>Key Personnel</u>			
Name	Title	Office	Mobile
Billy Goodwin	Vice President Drilling	972-371-5210	817-522-2928
Gary Martin	Drilling Superintendent		601-669-1774
Dee Smith	Drilling Superintendent	972-371-5447	972-822-1010
Aaron Byrd	Drilling Engineer	972-371-5267	214-507-2333
	Construction Superintendent		
	Construction Superintendent		
<u>Artesia</u>			
Ambulance			911
State Police		575-746-2703	
City Police		575-746-2703	
Sheriff's Office		575-746-9888	
Fire Department		575-746-2701	
Local Emergency Planning Committee		575-746-2122	
New Mexico Oil Conservation Division		575-748-1283	
<u>Carlsbad</u>			
Ambulance			911
State Police		575-885-3137	
Loving City Police		575-745-3511	
Sheriff's Office		575-887-7551	
Malaga Fire Department		575-745-2317	
Local Emergency Planning Committee		575-885-3581	
<u>Santa Fe</u>			
New Mexico Emergency Response Commission (Santa Fe)		505-476-9600	
New Mexico Emergency Response Commission (Santa Fe) 24 hrs		505-827-9126	
New Mexico State Emergency Operations Center		505-476-9635	
<u>National</u>			
Carlsbad BLM		575-234-5972	
National Emergency Response Center (Washington, D.C.)		800-424-8802	
<u>Medical</u>			
Flight for Life- 4000 24th St.; Lubbock, TX		806-743-9911	
Aerocare- R3, Box 49F; Lubbock, TX		806-747-8923	
Med Flight Air Amb- 2301 Yale Blvd S.E., D3; Albuquerque, NM		505-842-4433	
SB Air Med Service- 2505 Clark Carr Loop S.E.; Albuquerque, NM		505-842-4949	
<u>Other</u>			
Boots & Coots IWC		800-256-9688	or 281-931-8884
Cudd Pressure Control		432-699-0139	or 432-563-3356
Halliburton		575-746-2757	
B.J. Services		575-746-3569	

H2S Rig Diagram

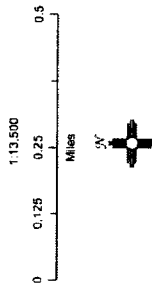
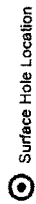
Warren Fed Com 121H
SHL 170' FNL & 770' FWL
25-23S-27E Eddy County, NM



Matador Production Company

Warren Fed Com #121H
H₂S Contingency Plan:
1 Mile Radius Map

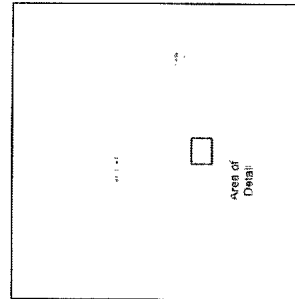
Section 25, Township 23S, Range 27E
Eddy County, New Mexico



NAD 1927 New Mexico State Plane East
FPS 3001 Feet

PLATTY TEXT

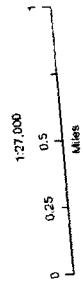
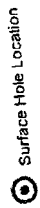
Prepared by Permits West, Inc., February 7, 2017
for Matador Production Company



Matador Production Company

Warren Fed Com #121H
H2S Contingency Plan:
2 Mile Radius Map

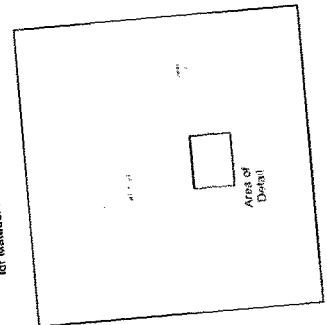
Section 25, Township 23S, Range 27E
Eddy County, New Mexico



NAD 1927 New Mexico State Plane East
FIPS 3001 Feet

PERMIT UNIT

Prepared by Permian West, Inc., February 7, 2017
for Matador Production Company





MS Energy Services Planning Report



Database: EDM Conroe
Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Site: Warren 25-23S-27E RB Fed COM
Well: #121H
Wellbore: Wellbore #1
Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project	Eddy County, New Mexico (NAD 27)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Well	#121H			
Well Position	+N/-S	466,656.86 usft	Northing:	466,656.86 usft
	+E/-W	556,827.92 usft	Easting:	556,827.92 usft
Position Uncertainty	0.00 usft		Wellhead Elevation:	Latitude: 32° 16' 58.161 N
				Longitude: 104° 8' 58.012 W
				Ground Level: 3,133.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2016	12/19/2016	7.33	60.03	48,049

Design	Design #3				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	179.89	

Plan Survey Tool Program	Date 12/21/2016				
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	12,381.32	Design #3 (Wellbore #1)	MWD	
				OWSG MWD - Standard	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,066.88	4.00	317.38	1,066.66	6.86	-6.31	1.50	1.50	0.00	317.38	
3,133.60	4.00	317.38	3,128.34	113.03	-104.01	0.00	0.00	0.00	0.00	
3,400.48	0.00	0.00	3,395.00	119.89	-110.32	1.50	-1.50	0.00	180.00	VP - Warren 25-23S
6,982.52	0.00	0.00	6,977.04	119.89	-110.32	0.00	0.00	0.00	0.00	
7,882.52	90.00	179.89	7,550.00	-453.07	-109.26	10.00	10.00	0.00	179.89	
12,381.32	90.00	179.89	7,550.00	-4,951.86	-100.92	0.00	0.00	0.00	0.00	PBHL - Warren 25-23S



MS Energy Services
Planning Report



Database: EDM Conroe
Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Site: Warren 25-23S-27E RB Fed COM
Well: #121H
Wellbore: Wellbore #1
Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP, 1.50°/100' Build									
900.00	1.50	317.38	899.99	0.96	-0.89	-0.96	1.50	1.50	0.00
1,000.00	3.00	317.38	999.91	3.85	-3.54	-3.86	1.50	1.50	0.00
1,066.88	4.00	317.38	1,066.66	6.86	-6.31	-6.87	1.50	1.50	0.00
Begin 4.00° Tangent									
1,100.00	4.00	317.38	1,099.70	8.56	-7.88	-8.57	0.00	0.00	0.00
1,200.00	4.00	317.38	1,199.46	13.70	-12.60	-13.72	0.00	0.00	0.00
1,300.00	4.00	317.38	1,299.21	18.83	-17.33	-18.87	0.00	0.00	0.00
1,400.00	4.00	317.38	1,398.97	23.97	-22.06	-24.01	0.00	0.00	0.00
1,500.00	4.00	317.38	1,498.73	29.11	-26.78	-29.16	0.00	0.00	0.00
1,600.00	4.00	317.38	1,598.48	34.25	-31.51	-34.31	0.00	0.00	0.00
1,700.00	4.00	317.38	1,698.24	39.38	-36.24	-39.45	0.00	0.00	0.00
1,800.00	4.00	317.38	1,797.99	44.52	-40.97	-44.60	0.00	0.00	0.00
1,900.00	4.00	317.38	1,897.75	49.66	-45.69	-49.75	0.00	0.00	0.00
2,000.00	4.00	317.38	1,997.51	54.80	-50.42	-54.89	0.00	0.00	0.00
2,100.00	4.00	317.38	2,097.26	59.93	-55.15	-60.04	0.00	0.00	0.00
2,200.00	4.00	317.38	2,197.02	65.07	-59.87	-65.18	0.00	0.00	0.00
2,300.00	4.00	317.38	2,296.77	70.21	-64.60	-70.33	0.00	0.00	0.00
2,400.00	4.00	317.38	2,396.53	75.34	-69.33	-75.48	0.00	0.00	0.00
2,500.00	4.00	317.38	2,496.29	80.48	-74.06	-80.62	0.00	0.00	0.00
2,600.00	4.00	317.38	2,596.04	85.62	-78.78	-85.77	0.00	0.00	0.00
2,700.00	4.00	317.38	2,695.80	90.76	-83.51	-90.92	0.00	0.00	0.00
2,800.00	4.00	317.38	2,795.55	95.89	-88.24	-96.06	0.00	0.00	0.00
2,900.00	4.00	317.38	2,895.31	101.03	-92.96	-101.21	0.00	0.00	0.00
3,000.00	4.00	317.38	2,995.07	106.17	-97.69	-106.36	0.00	0.00	0.00
3,100.00	4.00	317.38	3,094.82	111.31	-102.42	-111.50	0.00	0.00	0.00
3,133.60	4.00	317.38	3,128.34	113.03	-104.01	-113.23	0.00	0.00	0.00
Begin 1.50°/100' Drop									
3,200.00	3.01	317.38	3,194.62	116.02	-106.76	-116.22	1.50	-1.50	0.00
3,300.00	1.51	317.38	3,294.54	118.92	-109.42	-119.13	1.50	-1.50	0.00
3,400.48	0.00	0.00	3,395.00	119.89	-110.32	-120.10	1.50	-1.50	0.00
Begin Vertical Hold									
3,500.00	0.00	0.00	3,494.52	119.89	-110.32	-120.10	0.00	0.00	0.00
3,600.00	0.00	0.00	3,594.52	119.89	-110.32	-120.10	0.00	0.00	0.00
3,700.00	0.00	0.00	3,694.52	119.89	-110.32	-120.10	0.00	0.00	0.00
3,800.00	0.00	0.00	3,794.52	119.89	-110.32	-120.10	0.00	0.00	0.00
3,900.00	0.00	0.00	3,894.52	119.89	-110.32	-120.10	0.00	0.00	0.00
4,000.00	0.00	0.00	3,994.52	119.89	-110.32	-120.10	0.00	0.00	0.00
4,100.00	0.00	0.00	4,094.52	119.89	-110.32	-120.10	0.00	0.00	0.00
4,200.00	0.00	0.00	4,194.52	119.89	-110.32	-120.10	0.00	0.00	0.00
4,300.00	0.00	0.00	4,294.52	119.89	-110.32	-120.10	0.00	0.00	0.00
4,400.00	0.00	0.00	4,394.52	119.89	-110.32	-120.10	0.00	0.00	0.00
4,500.00	0.00	0.00	4,494.52	119.89	-110.32	-120.10	0.00	0.00	0.00
4,600.00	0.00	0.00	4,594.52	119.89	-110.32	-120.10	0.00	0.00	0.00
4,700.00	0.00	0.00	4,694.52	119.89	-110.32	-120.10	0.00	0.00	0.00



MS Energy Services
Planning Report



Database: EDM Conroe
Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Site: Warren 25-23S-27E RB Fed COM
Well: #121H
Wellbore: Wellbore #1
Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,800.00	0.00	0.00	4,794.52	119.89	-110.32	-120.10	0.00	0.00	0.00
4,900.00	0.00	0.00	4,894.52	119.89	-110.32	-120.10	0.00	0.00	0.00
5,000.00	0.00	0.00	4,994.52	119.89	-110.32	-120.10	0.00	0.00	0.00
5,100.00	0.00	0.00	5,094.52	119.89	-110.32	-120.10	0.00	0.00	0.00
5,200.00	0.00	0.00	5,194.52	119.89	-110.32	-120.10	0.00	0.00	0.00
5,300.00	0.00	0.00	5,294.52	119.89	-110.32	-120.10	0.00	0.00	0.00
5,400.00	0.00	0.00	5,394.52	119.89	-110.32	-120.10	0.00	0.00	0.00
5,500.00	0.00	0.00	5,494.52	119.89	-110.32	-120.10	0.00	0.00	0.00
5,600.00	0.00	0.00	5,594.52	119.89	-110.32	-120.10	0.00	0.00	0.00
5,700.00	0.00	0.00	5,694.52	119.89	-110.32	-120.10	0.00	0.00	0.00
5,800.00	0.00	0.00	5,794.52	119.89	-110.32	-120.10	0.00	0.00	0.00
5,900.00	0.00	0.00	5,894.52	119.89	-110.32	-120.10	0.00	0.00	0.00
6,000.00	0.00	0.00	5,994.52	119.89	-110.32	-120.10	0.00	0.00	0.00
6,100.00	0.00	0.00	6,094.52	119.89	-110.32	-120.10	0.00	0.00	0.00
6,200.00	0.00	0.00	6,194.52	119.89	-110.32	-120.10	0.00	0.00	0.00
6,300.00	0.00	0.00	6,294.52	119.89	-110.32	-120.10	0.00	0.00	0.00
6,400.00	0.00	0.00	6,394.52	119.89	-110.32	-120.10	0.00	0.00	0.00
6,500.00	0.00	0.00	6,494.52	119.89	-110.32	-120.10	0.00	0.00	0.00
6,600.00	0.00	0.00	6,594.52	119.89	-110.32	-120.10	0.00	0.00	0.00
6,700.00	0.00	0.00	6,694.52	119.89	-110.32	-120.10	0.00	0.00	0.00
6,800.00	0.00	0.00	6,794.52	119.89	-110.32	-120.10	0.00	0.00	0.00
6,900.00	0.00	0.00	6,894.52	119.89	-110.32	-120.10	0.00	0.00	0.00
6,982.52	0.00	0.00	6,977.04	119.89	-110.32	-120.10	0.00	0.00	0.00
Begin 10.00°/100' Build									
7,000.00	1.75	179.89	6,994.52	119.62	-110.32	-119.83	10.00	10.00	0.00
7,050.00	6.75	179.89	7,044.37	115.92	-110.31	-116.13	10.00	10.00	0.00
7,100.00	11.75	179.89	7,093.70	107.89	-110.30	-108.10	10.00	10.00	0.00
7,150.00	16.75	179.89	7,142.15	95.58	-110.27	-95.80	10.00	10.00	0.00
7,200.00	21.75	179.89	7,189.34	79.11	-110.24	-79.32	10.00	10.00	0.00
7,250.00	26.75	179.89	7,234.91	58.58	-110.20	-58.79	10.00	10.00	0.00
7,300.00	31.75	179.89	7,278.52	34.16	-110.16	-34.37	10.00	10.00	0.00
7,350.00	36.75	179.89	7,319.84	6.03	-110.11	-6.24	10.00	10.00	0.00
7,400.00	41.75	179.89	7,358.55	-25.60	-110.05	25.39	10.00	10.00	0.00
7,450.00	46.75	179.89	7,394.36	-60.47	-109.98	60.26	10.00	10.00	0.00
7,500.00	51.75	179.89	7,426.98	-98.34	-109.91	98.13	10.00	10.00	0.00
7,550.00	56.75	179.89	7,456.19	-138.90	-109.84	138.69	10.00	10.00	0.00
7,600.00	61.75	179.89	7,481.75	-181.86	-109.76	181.65	10.00	10.00	0.00
7,650.00	66.75	179.89	7,503.46	-226.88	-109.67	226.67	10.00	10.00	0.00
7,700.00	71.75	179.89	7,521.17	-273.62	-109.59	273.41	10.00	10.00	0.00
7,750.00	76.75	179.89	7,534.74	-321.73	-109.50	321.52	10.00	10.00	0.00
7,800.00	81.75	179.89	7,544.07	-370.83	-109.41	370.62	10.00	10.00	0.00
7,850.00	86.75	179.89	7,549.08	-420.57	-109.32	420.36	10.00	10.00	0.00
7,882.52	90.00	179.89	7,550.00	-453.07	-109.26	452.86	10.00	10.00	0.00
Begin 90.00° Lateral									
7,900.00	90.00	179.89	7,550.00	-470.55	-109.22	470.34	0.00	0.00	0.00
8,000.00	90.00	179.89	7,550.00	-570.55	-109.04	570.34	0.00	0.00	0.00
8,100.00	90.00	179.89	7,550.00	-670.55	-108.85	670.34	0.00	0.00	0.00
8,200.00	90.00	179.89	7,550.00	-770.55	-108.67	770.34	0.00	0.00	0.00
8,300.00	90.00	179.89	7,550.00	-870.55	-108.48	870.34	0.00	0.00	0.00
8,400.00	90.00	179.89	7,550.00	-970.55	-108.30	970.34	0.00	0.00	0.00
8,500.00	90.00	179.89	7,550.00	-1,070.55	-108.11	1,070.34	0.00	0.00	0.00
8,600.00	90.00	179.89	7,550.00	-1,170.55	-107.93	1,170.34	0.00	0.00	0.00
8,700.00	90.00	179.89	7,550.00	-1,270.55	-107.74	1,270.34	0.00	0.00	0.00



MS Energy Services Planning Report



Database: EDM Conroe
Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Site: Warren 25-23S-27E RB Fed COM
Well: #121H
Wellbore: Wellbore #1
Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,800.00	90.00	179.89	7,550.00	-1,370.55	-107.56	1,370.34	0.00	0.00	0.00
8,900.00	90.00	179.89	7,550.00	-1,470.55	-107.37	1,470.34	0.00	0.00	0.00
9,000.00	90.00	179.89	7,550.00	-1,570.55	-107.18	1,570.34	0.00	0.00	0.00
9,100.00	90.00	179.89	7,550.00	-1,670.55	-107.00	1,670.34	0.00	0.00	0.00
9,200.00	90.00	179.89	7,550.00	-1,770.55	-106.81	1,770.34	0.00	0.00	0.00
9,300.00	90.00	179.89	7,550.00	-1,870.55	-106.63	1,870.34	0.00	0.00	0.00
9,400.00	90.00	179.89	7,550.00	-1,970.55	-106.44	1,970.34	0.00	0.00	0.00
9,500.00	90.00	179.89	7,550.00	-2,070.55	-106.26	2,070.34	0.00	0.00	0.00
9,600.00	90.00	179.89	7,550.00	-2,170.55	-106.07	2,170.34	0.00	0.00	0.00
9,700.00	90.00	179.89	7,550.00	-2,270.55	-105.89	2,270.34	0.00	0.00	0.00
9,800.00	90.00	179.89	7,550.00	-2,370.55	-105.70	2,370.34	0.00	0.00	0.00
9,900.00	90.00	179.89	7,550.00	-2,470.55	-105.52	2,470.34	0.00	0.00	0.00
10,000.00	90.00	179.89	7,550.00	-2,570.55	-105.33	2,570.34	0.00	0.00	0.00
10,100.00	90.00	179.89	7,550.00	-2,670.55	-105.15	2,670.34	0.00	0.00	0.00
10,200.00	90.00	179.89	7,550.00	-2,770.54	-104.96	2,770.34	0.00	0.00	0.00
10,300.00	90.00	179.89	7,550.00	-2,870.54	-104.78	2,870.34	0.00	0.00	0.00
10,400.00	90.00	179.89	7,550.00	-2,970.54	-104.59	2,970.34	0.00	0.00	0.00
10,500.00	90.00	179.89	7,550.00	-3,070.54	-104.41	3,070.34	0.00	0.00	0.00
10,600.00	90.00	179.89	7,550.00	-3,170.54	-104.22	3,170.34	0.00	0.00	0.00
10,700.00	90.00	179.89	7,550.00	-3,270.54	-104.03	3,270.34	0.00	0.00	0.00
10,800.00	90.00	179.89	7,550.00	-3,370.54	-103.85	3,370.34	0.00	0.00	0.00
10,900.00	90.00	179.89	7,550.00	-3,470.54	-103.66	3,470.34	0.00	0.00	0.00
11,000.00	90.00	179.89	7,550.00	-3,570.54	-103.48	3,570.34	0.00	0.00	0.00
11,100.00	90.00	179.89	7,550.00	-3,670.54	-103.29	3,670.34	0.00	0.00	0.00
11,200.00	90.00	179.89	7,550.00	-3,770.54	-103.11	3,770.34	0.00	0.00	0.00
11,300.00	90.00	179.89	7,550.00	-3,870.54	-102.92	3,870.34	0.00	0.00	0.00
11,400.00	90.00	179.89	7,550.00	-3,970.54	-102.74	3,970.34	0.00	0.00	0.00
11,500.00	90.00	179.89	7,550.00	-4,070.54	-102.55	4,070.34	0.00	0.00	0.00
11,600.00	90.00	179.89	7,550.00	-4,170.54	-102.37	4,170.34	0.00	0.00	0.00
11,700.00	90.00	179.89	7,550.00	-4,270.54	-102.18	4,270.34	0.00	0.00	0.00
11,800.00	90.00	179.89	7,550.00	-4,370.54	-102.00	4,370.34	0.00	0.00	0.00
11,900.00	90.00	179.89	7,550.00	-4,470.54	-101.81	4,470.34	0.00	0.00	0.00
12,000.00	90.00	179.89	7,550.00	-4,570.54	-101.63	4,570.34	0.00	0.00	0.00
12,100.00	90.00	179.89	7,550.00	-4,670.54	-101.44	4,670.34	0.00	0.00	0.00
12,200.00	90.00	179.89	7,550.00	-4,770.54	-101.26	4,770.34	0.00	0.00	0.00
12,300.00	90.00	179.89	7,550.00	-4,870.54	-101.07	4,870.34	0.00	0.00	0.00
12,381.32	90.00	179.89	7,550.00	-4,951.86	-100.92	4,951.66	0.00	0.00	0.00
PBHL									



MS Energy Services Planning Report



Database: EDM Conroe
Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Site: Warren 25-23S-27E RB Fed COM
Well: #121H
Wellbore: Wellbore #1
Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
VP - Warren 25-23S-2 - plan hits target center - Point	0.00	0.00	3,395.00	119.89	-110.32	466,776.75	556,717.60	32° 16' 59.349 N	104° 8' 59.295 W
LTP - Warren 25-23S- - plan misses target center by 0.17usft at 12291.32usft MD (7550.00 TVD, -4861.86 N, -101.09 E) - Point	0.00	0.00	7,550.00	-4,861.86	-100.92	461,795.00	556,727.00	32° 16' 10.049 N	104° 8' 59.285 W
FTP - Warren 25-23S- - plan misses target center by 70.69usft at 7609.84usft MD (7486.33 TVD, -190.57 N, -109.74 E) - Point	0.00	0.00	7,550.00	-159.86	-109.92	466,497.00	556,718.00	32° 16' 56.581 N	104° 8' 59.296 W
PBHL - Warren 25-23- - plan hits target center - Point	0.00	0.00	7,550.00	-4,951.86	-100.92	461,705.00	556,727.00	32° 16' 9.158 N	104° 8' 59.286 W

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
480.00	480.00	13 3/8"	13-3/8	17-1/2
2,450.00	2,446.41	9 5/8"	9-5/8	12-1/4

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
800.00	800.00	0.00	0.00	KOP, 1.50°/100' Build
1,066.88	1,066.66	6.86	-6.31	Begin 4.00° Tangent
3,133.60	3,128.34	113.03	-104.01	Begin 1.50°/100' Drop
3,400.48	3,395.00	119.89	-110.32	Begin Vertical Hold
6,982.52	6,977.04	119.89	-110.32	Begin 10.00°/100' Build
7,882.52	7,550.00	-453.07	-109.26	Begin 90.00° Lateral
12,381.32	7,550.00	-4,951.86	-100.92	PBHL



Matador Resources

**Eddy County, New Mexico (NAD 27)
Warren 25-23S-27E RB Fed COM
#121H**

**Wellbore #1
Design #3**

Anticollision Report

21 December, 2016



MS Energy Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Reference Site: Warren 25-23S-27E RB Fed COM
Site Error: 0.00 usft
Reference Well: #121H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM Conroe
Offset TVD Reference: Offset Datum

Reference	Design #3
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	MD + Stations Interval 100.00usft
Depth Range:	Unlimited
Results Limited by:	Maximum center-center distance of 10,000.00 u
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Pedal Curve
Casing Method:	Not applied

Survey Tool Program Date 12/21/2016

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	12,381.32	Design #3 (Wellbore #1)	MWD	OWSG MWD - Standard

Summary

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Warren 25-23S-27E RB Fed COM						
#201H - Wellbore #1 - Design #3	800.00	800.00	30.00	24.73	5.690 CC	
#201H - Wellbore #1 - Design #3	900.00	899.30	30.29	24.31	5.065 ES	
#201H - Wellbore #1 - Design #3	7,100.00	7,107.55	165.43	115.23	3.295 SF	
#203H - Wellbore #1 - Design #1	12,381.32	7,566.57	2,326.66	2,213.22	20.510 CC, ES, SF	
#205H - Wellbore #1 - Design #3	800.00	800.00	30.04	24.77	5.697 CC, ES	
#205H - Wellbore #1 - Design #3	7,100.00	7,102.23	165.44	115.07	3.284 SF	
#206H - Wellbore #1 - Design #1	12,381.32	7,572.86	1,672.91	1,560.14	14.835 CC, ES, SF	
#221H - Wellbore #1 - Design #3	800.00	800.00	59.99	54.72	11.377 CC	
#221H - Wellbore #1 - Design #3	900.00	898.52	60.34	54.37	10.099 ES	
#221H - Wellbore #1 - Design #3	2,600.00	2,593.13	105.96	87.67	5.794 SF	
#225H - Wellbore #1 - Design #3	800.00	800.00	59.99	54.72	11.376 CC, ES	
#225H - Wellbore #1 - Design #3	7,200.00	7,203.89	332.53	281.62	6.533 SF	

Offset Design Warren 25-23S-27E RB Fed COM - #201H - Wellbore #1 - Design #3													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-90.09	-0.05	-30.00	30.00					
100.00	100.00	100.00	100.00	0.13	0.13	-90.09	-0.05	-30.00	30.00	29.75	0.25	117.879		
200.00	200.00	200.00	200.00	0.49	0.49	-90.09	-0.05	-30.00	30.00	29.03	0.97	30.884		
300.00	300.00	300.00	300.00	0.84	0.84	-90.09	-0.05	-30.00	30.00	28.31	1.69	17.769		
400.00	400.00	400.00	400.00	1.20	1.20	-90.09	-0.05	-30.00	30.00	27.60	2.41	12.473		
500.00	500.00	500.00	500.00	1.56	1.56	-90.09	-0.05	-30.00	30.00	26.88	3.12	9.609		
600.00	600.00	600.00	600.00	1.92	1.92	-90.09	-0.05	-30.00	30.00	26.16	3.84	7.815		
700.00	700.00	700.00	700.00	2.28	2.28	-90.09	-0.05	-30.00	30.00	25.45	4.56	6.585		
800.00	800.00	800.00	800.00	2.64	2.64	-90.09	-0.05	-30.00	30.00	24.73	5.27	5.690 CC		
900.00	899.99	899.30	899.29	2.99	2.99	-90.84	0.52	-31.16	30.29	24.31	5.98	5.065 ES		
1,000.00	999.91	998.58	998.49	3.35	3.34	-93.01	2.22	-34.64	31.17	24.49	6.68	4.668		
1,066.88	1,066.66	1,068.38	1,064.74	3.59	3.59	-95.15	3.98	-38.26	32.14	24.98	7.16	4.490		
1,100.00	1,099.70	1,101.94	1,097.77	3.71	3.71	-96.27	4.99	-40.33	32.71	25.32	7.39	4.424		
1,200.00	1,199.46	1,201.97	1,197.49	4.07	4.06	-99.44	8.05	-46.60	34.52	26.41	8.11	4.257		
1,300.00	1,299.21	1,302.00	1,297.22	4.43	4.43	-102.27	11.10	-52.87	36.43	27.60	8.83	4.126		
1,400.00	1,398.97	1,402.04	1,396.94	4.80	4.79	-104.82	14.16	-59.14	38.41	28.86	9.55	4.022		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Energy Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Reference Site: Warren 25-23S-27E RB Fed COM
Site Error: 0.00 usft
Reference Well: #121H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM Conroe
Offset TVD Reference: Offset Datum

Offset Design Warren 25-23S-27E RB Fed COM - #201H - Wellbore #1 - Design #3														Offset Site Error:	0.00 usft
Survey Program: 0-MWD														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
1,500.00	1,498.73	1,502.07	1,496.66	5.16	5.16	-107.12	17.21	-65.41	40.47	30.19	10.28	3.938			
1,600.00	1,598.48	1,602.10	1,596.39	5.53	5.52	-109.19	20.27	-71.68	42.58	31.57	11.01	3.869			
1,700.00	1,698.24	1,702.14	1,696.11	5.90	5.89	-111.06	23.32	-77.95	44.74	33.01	11.74	3.812			
1,800.00	1,797.99	1,802.17	1,795.83	6.27	6.26	-112.76	26.38	-84.21	46.95	34.48	12.47	3.765			
1,900.00	1,897.75	1,902.20	1,895.55	6.64	6.63	-114.30	29.43	-90.48	49.19	35.99	13.20	3.725			
2,000.00	1,997.51	2,002.24	1,995.28	7.00	7.00	-115.71	32.49	-96.75	51.47	37.53	13.94	3.692			
2,100.00	2,097.26	2,102.27	2,095.00	7.38	7.37	-117.00	35.54	-103.02	53.77	39.10	14.68	3.663			
2,200.00	2,197.02	2,202.31	2,194.72	7.75	7.74	-118.18	38.60	-109.29	56.10	40.69	15.42	3.639			
2,300.00	2,296.77	2,302.34	2,294.45	8.12	8.11	-119.27	41.65	-115.56	58.46	42.30	16.16	3.618			
2,400.00	2,396.53	2,402.37	2,394.17	8.49	8.48	-120.27	44.71	-121.82	60.83	43.93	16.90	3.600			
2,500.00	2,496.29	2,497.59	2,493.89	8.86	8.84	-121.19	47.76	-128.09	63.22	45.59	17.62	3.587			
2,600.00	2,596.04	2,596.66	2,592.62	9.23	9.21	-121.20	51.33	-135.40	66.28	47.93	18.35	3.612			
2,700.00	2,695.80	2,695.55	2,690.93	9.60	9.59	-119.48	56.00	-144.99	70.79	51.71	19.08	3.711			
2,800.00	2,795.55	2,805.51	2,788.99	9.97	10.02	-116.48	61.74	-156.78	76.86	57.02	19.84	3.875			
2,900.00	2,895.31	2,905.82	2,887.71	10.35	10.42	-113.52	67.83	-169.26	83.55	62.98	20.57	4.062			
3,000.00	2,995.07	3,006.13	2,986.43	10.72	10.82	-111.00	73.91	-181.74	90.44	69.14	21.30	4.246			
3,100.00	3,094.82	3,106.44	3,085.15	11.09	11.22	-108.84	79.99	-194.21	97.47	75.44	22.03	4.424			
3,133.60	3,128.34	3,127.05	3,118.31	11.21	11.31	-108.18	82.03	-198.41	99.86	77.64	22.23	4.493			
3,200.00	3,194.62	3,193.21	3,183.83	11.46	11.57	-106.68	86.07	-206.69	104.88	82.17	22.71	4.619			
3,300.00	3,294.54	3,292.66	3,282.32	11.82	11.97	-103.72	92.14	-219.14	113.59	90.18	23.41	4.852			
3,400.00	3,394.52	3,391.85	3,380.54	12.18	12.38	-100.15	98.19	-231.55	123.95	99.85	24.10	5.143			
3,400.48	3,395.00	3,392.32	3,381.00	12.18	12.38	-100.13	98.22	-231.61	124.01	99.90	24.11	5.144			
3,500.00	3,494.52	3,491.39	3,479.11	12.52	12.78	-96.68	104.25	-243.98	135.45	110.66	24.79	5.463			
3,600.00	3,594.52	3,593.88	3,580.84	12.87	13.19	-94.02	109.70	-255.17	145.86	120.33	25.53	5.714			
3,700.00	3,694.52	3,696.98	3,683.47	13.22	13.59	-92.20	113.98	-263.95	154.14	127.89	26.26	5.871			
3,800.00	3,794.52	3,800.53	3,786.78	13.57	13.97	-91.02	117.05	-270.26	160.16	133.18	26.98	5.937			
3,900.00	3,894.52	3,904.39	3,890.55	13.92	14.34	-90.34	118.91	-274.06	163.79	136.10	27.69	5.915			
4,000.00	3,994.52	4,008.40	3,994.54	14.27	14.70	-90.13	119.52	-275.32	165.00	136.62	28.38	5.813			
4,007.21	4,001.73	4,015.90	4,002.05	14.30	14.73	-90.13	119.52	-275.31	164.99	136.56	28.43	5.803			
4,100.00	4,094.52	4,108.37	4,094.52	14.62	15.04	-90.13	119.52	-275.32	165.00	135.92	29.08	5.673			
4,200.00	4,194.52	4,208.37	4,194.52	14.98	15.38	-90.13	119.52	-275.32	165.00	135.22	29.78	5.540			
4,300.00	4,294.52	4,308.37	4,294.52	15.33	15.72	-90.13	119.52	-275.32	165.00	134.52	30.48	5.413			
4,400.00	4,394.52	4,408.37	4,394.52	15.68	16.06	-90.13	119.52	-275.32	165.00	133.82	31.18	5.291			
4,500.00	4,494.52	4,508.37	4,494.52	16.03	16.40	-90.13	119.52	-275.32	165.00	133.11	31.89	5.175			
4,600.00	4,594.52	4,608.37	4,594.52	16.38	16.74	-90.13	119.52	-275.32	165.00	132.41	32.59	5.063			
4,700.00	4,694.52	4,708.37	4,694.52	16.74	17.09	-90.13	119.52	-275.32	165.00	131.71	33.29	4.956			
4,800.00	4,794.52	4,808.37	4,794.52	17.09	17.43	-90.13	119.52	-275.32	165.00	131.00	34.00	4.854			
4,900.00	4,894.52	4,908.37	4,894.52	17.44	17.77	-90.13	119.52	-275.32	165.00	130.30	34.70	4.755			
5,000.00	4,994.52	5,008.37	4,994.52	17.80	18.12	-90.13	119.52	-275.32	165.00	129.59	35.41	4.660			
5,100.00	5,094.52	5,108.37	5,094.52	18.15	18.46	-90.13	119.52	-275.32	165.00	128.89	36.11	4.569			
5,200.00	5,194.52	5,208.37	5,194.52	18.51	18.81	-90.13	119.52	-275.32	165.00	128.18	36.82	4.482			
5,300.00	5,294.52	5,308.37	5,294.52	18.86	19.15	-90.13	119.52	-275.32	165.00	127.48	37.52	4.397			
5,400.00	5,394.52	5,408.37	5,394.52	19.21	19.50	-90.13	119.52	-275.32	165.00	126.77	38.23	4.316			
5,500.00	5,494.52	5,508.37	5,494.52	19.57	19.85	-90.13	119.52	-275.32	165.00	126.06	38.94	4.238			
5,600.00	5,594.52	5,608.37	5,594.52	19.92	20.19	-90.13	119.52	-275.32	165.00	125.36	39.64	4.162			
5,700.00	5,694.52	5,708.37	5,694.52	20.28	20.54	-90.13	119.52	-275.32	165.00	124.65	40.35	4.089			
5,800.00	5,794.52	5,808.37	5,794.52	20.63	20.89	-90.13	119.52	-275.32	165.00	123.94	41.06	4.019			
5,900.00	5,894.52	5,908.37	5,894.52	20.99	21.24	-90.13	119.52	-275.32	165.00	123.23	41.77	3.950			
6,000.00	5,994.52	6,008.37	5,994.52	21.34	21.59	-90.13	119.52	-275.32	165.00	122.52	42.48	3.885			
6,100.00	6,094.52	6,108.37	6,094.52	21.70	21.93	-90.13	119.52	-275.32	165.00	121.82	43.18	3.821			
6,200.00	6,194.52	6,208.37	6,194.52	22.05	22.28	-90.13	119.52	-275.32	165.00	121.11	43.89	3.759			
6,300.00	6,294.52	6,308.37	6,294.52	22.41	22.63	-90.13	119.52	-275.32	165.00	120.40	44.60	3.699			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Energy Services
Anticollision Report



Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Reference Site: Warren 25-23S-27E RB Fed COM
Site Error: 0.00 usft
Reference Well: #121H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM Conroe
Offset TVD Reference: Offset Datum

Offset Design Warren 25-23S-27E RB Fed COM - #201H - Wellbore #1 - Design #3													Offset Site Error: 0.00 usft
Survey Program: 0-MWD													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
6,400.00	6,394.52	6,408.37	6,394.52	22.76	22.98	-90.13	119.52	-275.32	165.00	119.69	45.31	3.641	
6,500.00	6,494.52	6,508.37	6,494.52	23.12	23.33	-90.13	119.52	-275.32	165.00	118.98	46.02	3.585	
6,600.00	6,594.52	6,608.37	6,594.52	23.48	23.68	-90.13	119.52	-275.32	165.00	118.27	46.73	3.531	
6,700.00	6,694.52	6,708.37	6,694.52	23.83	24.03	-90.13	119.52	-275.32	165.00	117.56	47.44	3.478	
6,800.00	6,794.52	6,808.37	6,794.52	24.19	24.39	-90.13	119.52	-275.32	165.00	116.85	48.15	3.427	
6,900.00	6,894.52	6,908.37	6,894.52	24.54	24.74	-90.13	119.52	-275.32	165.00	116.14	48.86	3.377	
6,982.52	6,977.04	7,009.11	6,977.04	24.84	25.09	-90.13	119.52	-275.32	165.00	115.49	49.51	3.332	
6,991.12	6,985.64	7,000.51	6,985.64	24.87	25.06	-90.11	119.52	-275.32	165.00	115.49	49.51	3.332	
7,000.00	6,994.52	7,008.37	6,994.52	24.90	25.09	-90.04	119.52	-275.32	165.00	115.43	49.57	3.329	
7,050.00	7,044.37	7,058.22	7,044.37	25.05	25.26	-88.75	119.52	-275.32	165.05	115.15	49.90	3.308	
7,100.00	7,093.70	7,107.55	7,093.70	25.21	25.44	-85.97	119.52	-275.32	165.43	115.23	50.21	3.295 SF	
7,150.00	7,142.15	7,156.00	7,142.15	25.35	25.61	-81.75	119.52	-275.32	166.77	116.27	50.50	3.302	
7,200.00	7,189.34	7,203.19	7,189.34	25.49	25.77	-76.24	119.52	-275.32	169.95	119.16	50.79	3.346	
7,250.00	7,234.91	7,248.76	7,234.91	25.63	25.93	-69.74	119.52	-275.32	176.00	124.91	51.09	3.445	
7,300.00	7,278.52	7,307.62	7,278.52	25.75	26.14	-62.67	119.52	-275.32	185.91	134.48	51.44	3.614	
7,350.00	7,319.84	7,333.69	7,319.84	25.86	26.23	-55.51	119.52	-275.32	200.44	148.75	51.69	3.878	
7,400.00	7,358.55	7,372.40	7,358.55	25.97	26.37	-48.72	119.52	-275.32	219.94	167.95	51.99	4.231	
7,450.00	7,394.36	7,408.21	7,394.36	26.08	26.49	-42.57	119.52	-275.32	244.40	192.13	52.27	4.676	
7,500.00	7,426.98	7,440.83	7,426.98	26.22	26.61	-37.21	119.52	-275.32	273.53	221.00	52.53	5.207	
7,550.00	7,456.19	7,470.04	7,456.19	26.37	26.71	-32.63	119.52	-275.32	306.86	254.10	52.76	5.816	
7,600.00	7,481.75	7,504.40	7,481.75	26.54	26.83	-28.78	119.52	-275.32	343.86	290.87	52.99	6.489	
7,650.00	7,503.46	7,517.31	7,503.46	26.71	26.88	-25.56	119.52	-275.32	383.96	330.84	53.12	7.228	
7,700.00	7,521.17	7,535.02	7,521.17	26.89	26.94	-22.86	119.52	-275.32	426.64	373.39	53.25	8.012	
7,750.00	7,534.74	7,548.59	7,534.74	27.09	26.99	-20.60	119.52	-275.32	471.37	418.02	53.35	8.835	
7,800.00	7,544.07	7,557.92	7,544.07	27.30	27.02	-18.69	119.52	-275.32	517.66	464.23	53.43	9.689	
7,850.00	7,549.08	7,562.93	7,549.08	27.52	27.04	-17.09	119.52	-275.32	565.02	511.55	53.47	10.566	
7,882.52	7,550.00	7,563.85	7,550.00	27.67	27.04	-16.17	119.52	-275.32	596.18	542.69	53.49	11.145	
7,900.00	7,550.00	7,563.85	7,550.00	27.75	27.04	-15.72	119.52	-275.32	613.00	559.50	53.50	11.458	
8,000.00	7,550.00	7,563.85	7,550.00	28.27	27.04	-13.55	119.52	-275.32	709.82	656.29	53.53	13.260	
8,100.00	7,550.00	7,563.85	7,550.00	28.88	27.04	-11.90	119.52	-275.32	807.41	753.85	53.56	15.075	
8,200.00	7,550.00	7,563.85	7,550.00	29.57	27.04	-10.60	119.52	-275.32	905.53	851.95	53.58	16.899	
8,300.00	7,550.00	7,563.85	7,550.00	30.34	27.04	-9.56	119.52	-275.32	1,004.03	950.42	53.61	18.730	
8,400.00	7,550.00	7,563.85	7,550.00	31.17	27.04	-8.71	119.52	-275.32	1,102.79	1,049.16	53.63	20.564	
8,500.00	7,550.00	7,563.85	7,550.00	32.07	27.04	-8.00	119.52	-275.32	1,201.76	1,148.11	53.65	22.401	
8,600.00	7,550.00	7,563.85	7,550.00	33.03	27.04	-7.39	119.52	-275.32	1,300.88	1,247.22	53.67	24.240	
8,700.00	7,550.00	7,563.85	7,550.00	34.04	27.04	-6.87	119.52	-275.32	1,400.13	1,346.45	53.69	26.080	
8,800.00	7,550.00	7,563.85	7,550.00	35.09	27.04	-6.42	119.52	-275.32	1,499.48	1,445.78	53.71	27.921	
8,900.00	7,550.00	7,563.85	7,550.00	36.20	27.04	-6.03	119.52	-275.32	1,598.91	1,545.19	53.72	29.761	
9,000.00	7,550.00	7,563.85	7,550.00	37.34	27.04	-5.68	119.52	-275.32	1,698.41	1,644.66	53.75	31.601	
9,100.00	7,550.00	7,563.85	7,550.00	38.53	27.04	-5.37	119.52	-275.32	1,797.96	1,744.20	53.77	33.440	
9,200.00	7,550.00	11,018.25	9,350.00	39.74	44.35	-90.11	-1,771.20	-437.25	1,830.08	1,788.09	41.99	43.588	
9,300.00	7,550.00	11,118.25	9,350.00	40.99	45.45	-90.11	-1,871.20	-437.05	1,830.08	1,786.92	43.16	42.404	
9,400.00	7,550.00	11,218.25	9,350.00	42.26	46.58	-90.11	-1,971.20	-436.85	1,830.07	1,785.71	44.36	41.254	
9,500.00	7,550.00	11,318.25	9,350.00	43.56	47.74	-90.11	-2,071.20	-436.65	1,830.07	1,784.48	45.59	40.141	
9,600.00	7,550.00	11,418.25	9,350.00	44.89	48.94	-90.11	-2,171.20	-436.45	1,830.07	1,783.22	46.85	39.064	
9,700.00	7,550.00	11,518.25	9,350.00	46.23	50.16	-90.11	-2,271.20	-436.25	1,830.07	1,781.94	48.13	38.025	
9,800.00	7,550.00	11,618.25	9,350.00	47.60	51.40	-90.11	-2,371.20	-436.06	1,830.06	1,780.63	49.43	37.023	
9,900.00	7,550.00	11,718.25	9,350.00	48.98	52.67	-90.11	-2,471.20	-435.86	1,830.06	1,779.31	50.75	36.058	
10,000.00	7,550.00	11,818.25	9,350.00	50.38	53.95	-90.11	-2,571.20	-435.66	1,830.06	1,777.96	52.09	35.130	
10,100.00	7,550.00	11,918.25	9,350.00	51.80	55.26	-90.11	-2,671.20	-435.46	1,830.06	1,776.60	53.45	34.236	
10,200.00	7,550.00	12,018.25	9,350.00	53.23	56.59	-90.11	-2,771.20	-435.26	1,830.05	1,775.23	54.83	33.378	
10,300.00	7,550.00	12,118.25	9,350.00	54.67	57.93	-90.11	-2,871.20	-435.06	1,830.05	1,773.83	56.22	32.553	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Energy Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Reference Site: Warren 25-23S-27E RB Fed COM
Site Error: 0.00 usft
Reference Well: #121H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM Conroe
Offset TVD Reference: Offset Datum

Offset Design Warren 25-23S-27E RB Fed COM - #201H - Wellbore #1 - Design #3													Offset Site Error: 0.00 usft
Survey Program: 0-MWD													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,400.00	7,550.00	12,218.25	9,350.00	56.12	59.29	-90.11	-2,971.20	-434.86	1,830.05	1,772.43	57.62	31.759	
10,500.00	7,550.00	12,318.25	9,350.00	57.59	60.66	-90.11	-3,071.20	-434.66	1,830.05	1,771.01	59.04	30.997	
10,600.00	7,550.00	12,418.25	9,350.00	59.06	62.05	-90.11	-3,171.20	-434.47	1,830.04	1,769.58	60.47	30.265	
10,700.00	7,550.00	12,518.25	9,350.00	60.54	63.45	-90.11	-3,271.20	-434.27	1,830.04	1,768.13	61.91	29.561	
10,800.00	7,550.00	12,618.25	9,350.00	62.04	64.86	-90.11	-3,371.20	-434.07	1,830.04	1,766.68	63.36	28.884	
10,900.00	7,550.00	12,718.25	9,350.00	63.54	66.28	-90.11	-3,471.20	-433.87	1,830.04	1,765.22	64.82	28.233	
11,000.00	7,550.00	12,818.25	9,350.00	65.05	67.72	-90.11	-3,571.20	-433.67	1,830.04	1,763.75	66.29	27.608	
11,100.00	7,550.00	12,918.25	9,350.00	66.56	69.16	-90.11	-3,671.20	-433.47	1,830.03	1,762.27	67.77	27.005	
11,200.00	7,550.00	13,018.25	9,350.00	68.08	70.62	-90.11	-3,771.20	-433.27	1,830.03	1,760.78	69.25	26.426	
11,300.00	7,550.00	13,118.25	9,350.00	69.61	72.08	-90.11	-3,871.20	-433.08	1,830.03	1,759.28	70.74	25.868	
11,400.00	7,550.00	13,218.25	9,350.00	71.15	73.55	-90.11	-3,971.20	-432.88	1,830.03	1,757.78	72.24	25.331	
11,500.00	7,550.00	13,318.25	9,350.00	72.69	75.03	-90.11	-4,071.20	-432.68	1,830.02	1,756.27	73.75	24.813	
11,600.00	7,550.00	13,418.25	9,350.00	74.23	76.51	-90.11	-4,171.20	-432.48	1,830.02	1,754.76	75.26	24.315	
11,700.00	7,550.00	13,518.25	9,350.00	75.78	78.01	-90.11	-4,271.20	-432.28	1,830.02	1,753.24	76.78	23.834	
11,800.00	7,550.00	13,618.25	9,350.00	77.33	79.50	-90.11	-4,371.20	-432.08	1,830.02	1,751.71	78.31	23.370	
11,900.00	7,550.00	13,718.25	9,350.00	78.89	81.01	-90.11	-4,471.20	-431.88	1,830.01	1,750.18	79.84	22.922	
12,000.00	7,550.00	13,818.25	9,350.00	80.45	82.52	-90.11	-4,571.20	-431.69	1,830.01	1,748.64	81.37	22.490	
12,100.00	7,550.00	13,918.25	9,350.00	82.02	84.04	-90.11	-4,671.20	-431.49	1,830.01	1,747.10	82.91	22.072	
12,200.00	7,550.00	14,018.25	9,350.00	83.59	85.56	-90.11	-4,771.20	-431.29	1,830.01	1,745.55	84.45	21.669	
12,300.00	7,550.00	14,118.25	9,350.00	85.16	87.09	-90.11	-4,871.20	-431.09	1,830.00	1,744.00	86.00	21.279	
12,381.32	7,550.00	14,199.57	9,350.00	86.44	88.33	-90.11	-4,952.52	-430.93	1,830.00	1,742.74	87.26	20.971	



MS Energy Services

Anticollision Report



Company: Matador Resources
 Project: Eddy County, New Mexico (NAD 27)
 Reference Site: Warren 25-23S-27E RB Fed COM
 Site Error: 0.00 usft
 Reference Well: #121H
 Well Error: 0.00 usft
 Reference Wellbore: Wellbore #1
 Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
 TVD Reference: WELL @ 3162.00usft (Patterson 297)
 MD Reference: WELL @ 3162.00usft (Patterson 297)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM Conroe
 Offset TVD Reference: Offset Datum

Offset Design Warren 25-23S-27E RB Fed COM - #203H - Wellbore #1 - Design #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	160.47	-5,561.76	1,972.79	5,901.29				
100.00	100.00	88.00	88.00	0.13	0.11	160.47	-5,561.76	1,972.79	5,901.28	5,901.04	0.24	N/A	
200.00	200.00	188.00	188.00	0.49	0.44	160.47	-5,561.76	1,972.79	5,901.28	5,900.35	0.93	6,356.111	
300.00	300.00	288.00	288.00	0.84	0.80	160.47	-5,561.76	1,972.79	5,901.28	5,899.63	1.65	3,586.564	
400.00	400.00	388.00	388.00	1.20	1.16	160.47	-5,561.76	1,972.79	5,901.28	5,898.92	2.36	2,498.077	
500.00	500.00	488.00	488.00	1.56	1.52	160.47	-5,561.76	1,972.79	5,901.28	5,898.20	3.08	1,916.453	
600.00	600.00	588.00	588.00	1.92	1.88	160.47	-5,561.76	1,972.79	5,901.28	5,897.48	3.80	1,554.517	
700.00	700.00	688.00	688.00	2.28	2.24	160.47	-5,561.76	1,972.79	5,901.28	5,896.76	4.51	1,307.572	
800.00	800.00	788.00	788.00	2.64	2.59	160.47	-5,561.76	1,972.79	5,901.28	5,896.05	5.23	1,128.330	
900.00	899.99	1,255.60	1,254.57	2.99	4.28	160.26	-5,539.57	1,987.71	5,898.00	5,890.75	7.26	812.502	
1,000.00	999.91	1,355.07	1,353.49	3.35	4.64	160.16	-5,530.95	1,993.51	5,895.41	5,887.43	7.98	738.950	
1,056.54	1,056.35	1,411.28	1,409.40	3.55	4.85	160.10	-5,526.07	1,996.79	5,895.02	5,886.64	8.39	702.876	
1,066.88	1,066.66	1,421.56	1,419.62	3.59	4.89	160.09	-5,525.18	1,997.39	5,895.04	5,886.57	8.46	696.659	
1,100.00	1,099.70	1,454.47	1,452.35	3.71	5.02	160.05	-5,522.33	1,999.31	5,895.12	5,886.42	8.70	677.433	
1,200.00	1,199.46	1,553.85	1,551.19	4.07	5.39	159.95	-5,513.71	2,005.11	5,895.39	5,885.96	9.43	625.198	
1,300.00	1,299.21	1,653.23	1,650.02	4.43	5.76	159.84	-5,505.09	2,010.90	5,895.68	5,885.52	10.16	580.299	
1,400.00	1,398.97	1,752.61	1,748.86	4.80	6.14	159.73	-5,496.47	2,016.70	5,895.99	5,885.10	10.89	541.318	
1,500.00	1,498.73	1,851.99	1,847.69	5.16	6.52	159.62	-5,487.85	2,022.50	5,896.32	5,884.70	11.63	507.174	
1,600.00	1,598.48	1,951.37	1,946.53	5.53	6.90	159.51	-5,479.23	2,028.30	5,896.68	5,884.32	12.36	477.031	
1,700.00	1,698.24	2,050.75	2,045.36	5.90	7.28	159.41	-5,470.61	2,034.09	5,897.05	5,883.95	13.10	450.233	
1,800.00	1,797.99	2,150.13	2,144.20	6.27	7.66	159.30	-5,461.99	2,039.89	5,897.45	5,883.61	13.84	426.259	
1,900.00	1,897.75	2,249.51	2,243.03	6.64	8.05	159.19	-5,453.37	2,045.69	5,897.86	5,883.29	14.57	404.689	
2,000.00	1,997.51	2,348.89	2,341.86	7.00	8.43	159.08	-5,444.75	2,051.48	5,898.30	5,882.99	15.31	385.182	
2,100.00	2,097.26	2,448.27	2,440.70	7.38	8.81	158.98	-5,436.13	2,057.28	5,898.76	5,882.70	16.05	367.457	
2,200.00	2,197.02	2,547.65	2,539.53	7.75	9.20	158.87	-5,427.51	2,063.08	5,899.24	5,882.44	16.79	351.284	
2,300.00	2,296.77	2,647.03	2,638.37	8.12	9.58	158.76	-5,418.89	2,068.88	5,899.74	5,882.20	17.53	336.467	
2,400.00	2,396.53	2,981.87	2,970.04	8.49	10.93	158.37	-5,381.31	2,094.15	5,899.03	5,879.84	19.18	307.509	
2,500.00	2,496.29	3,080.39	3,067.07	8.86	11.34	158.21	-5,367.11	2,103.69	5,895.64	5,875.69	19.95	295.558	
2,600.00	2,596.04	3,178.91	3,164.09	9.23	11.76	158.05	-5,352.92	2,113.24	5,892.29	5,871.58	20.71	284.467	
2,700.00	2,695.80	3,277.44	3,261.12	9.60	12.18	157.89	-5,338.72	2,122.79	5,889.00	5,867.51	21.48	274.148	
2,800.00	2,795.55	3,375.96	3,358.14	9.97	12.60	157.72	-5,324.52	2,132.34	5,885.75	5,863.50	22.25	264.526	
2,900.00	2,895.31	3,474.48	3,455.17	10.35	13.02	157.56	-5,310.33	2,141.88	5,882.55	5,859.53	23.02	255.534	
3,000.00	2,995.07	3,573.00	3,552.20	10.72	13.44	157.40	-5,296.13	2,151.43	5,879.40	5,855.60	23.79	247.112	
3,100.00	3,094.82	3,671.53	3,649.22	11.09	13.87	157.23	-5,281.94	2,160.98	5,876.29	5,851.73	24.57	239.210	
3,133.60	3,128.34	3,704.63	3,681.82	11.21	14.01	157.18	-5,277.17	2,164.19	5,875.26	5,850.44	24.83	236.664	
3,200.00	3,194.62	3,770.06	3,746.26	11.46	14.29	157.07	-5,267.74	2,170.53	5,872.69	5,847.36	25.34	231.765	
3,300.00	3,294.54	3,861.48	3,836.29	11.82	14.69	156.93	-5,254.56	2,179.39	5,868.82	5,840.74	26.08	224.935	
3,400.00	3,394.52	3,918.87	3,892.88	12.18	14.93	156.85	-5,246.65	2,184.71	5,858.95	5,832.27	26.68	219.584	
3,400.48	3,395.00	3,919.13	3,893.13	12.18	14.93	156.85	-5,246.61	2,184.73	5,858.91	5,832.23	26.68	219.560	
3,500.00	3,494.52	3,972.61	3,946.00	12.52	15.16	156.78	-5,239.87	2,189.27	5,850.64	5,823.38	27.26	214.621	
3,600.00	3,594.52	4,026.58	3,999.45	12.87	15.38	156.72	-5,233.70	2,193.42	5,843.11	5,815.27	27.83	209.920	
3,700.00	3,694.52	4,080.74	4,053.19	13.22	15.60	156.66	-5,228.13	2,197.16	5,836.37	5,807.96	28.41	205.461	
3,800.00	3,794.52	4,135.09	4,107.21	13.57	15.81	156.61	-5,223.18	2,200.49	5,830.41	5,801.43	28.97	201.237	
3,900.00	3,894.52	4,200.00	4,171.83	13.92	16.06	156.56	-5,218.10	2,203.91	5,825.24	5,795.67	29.58	196.957	
4,000.00	3,994.52	4,244.24	4,215.93	14.27	16.23	156.53	-5,215.16	2,205.88	5,820.83	5,790.73	30.09	193.422	
4,100.00	4,094.52	14,238.69	9,320.00	14.62	95.78	94.53	-64.92	2,223.80	5,737.02	5,673.91	63.11	90.908	
4,200.00	4,194.52	14,238.69	9,320.00	14.98	95.78	94.53	-64.92	2,223.80	5,645.88	5,582.16	63.72	88.608	
4,300.00	4,294.52	14,238.69	9,320.00	15.33	95.78	94.53	-64.92	2,223.80	5,555.04	5,490.69	64.35	86.329	
4,400.00	4,394.52	14,238.69	9,320.00	15.68	95.78	94.53	-64.92	2,223.80	5,464.52	5,399.52	65.00	84.070	
4,500.00	4,494.52	14,238.69	9,320.00	16.03	95.78	94.53	-64.92	2,223.80	5,374.33	5,308.66	65.67	81.833	
4,600.00	4,594.52	14,238.69	9,320.00	16.38	95.78	94.53	-64.92	2,223.80	5,284.50	5,218.13	66.37	79.619	
4,700.00	4,694.52	14,238.69	9,320.00	16.74	95.78	94.53	-64.92	2,223.80	5,195.04	5,127.95	67.09	77.428	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Energy Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Reference Site: Warren 25-23S-27E RB Fed COM
Site Error: 0.00 usft
Reference Well: #121H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM Conroe
Offset TVD Reference: Offset Datum

Offset Design Warren 25-23S-27E RB Fed COM - #203H - Wellbore #1 - Design #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,800.00	4,794.52	14,238.69	9,320.00	17.09	95.78	94.53	-64.92	2,223.80	5,105.97	5,038.13	67.84	75.262	
4,900.00	4,894.52	14,238.69	9,320.00	17.44	95.78	94.53	-64.92	2,223.80	5,017.32	4,948.70	68.62	73.120	
5,000.00	4,994.52	14,238.69	9,320.00	17.80	95.78	94.53	-64.92	2,223.80	4,929.09	4,859.67	69.42	71.004	
5,100.00	5,094.52	14,238.69	9,320.00	18.15	95.78	94.53	-64.92	2,223.80	4,841.33	4,771.08	70.25	68.915	
5,200.00	5,194.52	14,238.69	9,320.00	18.51	95.78	94.53	-64.92	2,223.80	4,754.05	4,682.94	71.11	66.853	
5,300.00	5,294.52	14,238.69	9,320.00	18.86	95.78	94.53	-64.92	2,223.80	4,667.28	4,595.27	72.00	64.820	
5,400.00	5,394.52	14,238.69	9,320.00	19.21	95.78	94.53	-64.92	2,223.80	4,581.05	4,508.12	72.93	62.815	
5,500.00	5,494.52	14,238.69	9,320.00	19.57	95.78	94.53	-64.92	2,223.80	4,495.39	4,421.50	73.89	60.841	
5,600.00	5,594.52	14,238.69	9,320.00	19.92	95.78	94.53	-64.92	2,223.80	4,410.33	4,335.45	74.88	58.898	
5,700.00	5,694.52	14,238.69	9,320.00	20.28	95.78	94.53	-64.92	2,223.80	4,325.91	4,250.00	75.91	56.986	
5,800.00	5,794.52	14,238.69	9,320.00	20.63	95.78	94.53	-64.92	2,223.80	4,242.17	4,165.19	76.98	55.108	
5,900.00	5,894.52	14,238.69	9,320.00	20.99	95.78	94.53	-64.92	2,223.80	4,159.15	4,081.06	78.09	53.264	
6,000.00	5,994.52	14,238.69	9,320.00	21.34	95.78	94.53	-64.92	2,223.80	4,076.89	3,997.65	79.23	51.454	
6,100.00	6,094.52	14,238.69	9,320.00	21.70	95.78	94.53	-64.92	2,223.80	3,995.44	3,915.02	80.42	49.681	
6,200.00	6,194.52	14,238.69	9,320.00	22.05	95.78	94.53	-64.92	2,223.80	3,914.85	3,833.19	81.65	47.945	
6,300.00	6,294.52	14,238.69	9,320.00	22.41	95.78	94.53	-64.92	2,223.80	3,835.17	3,752.24	82.93	46.246	
6,400.00	6,394.52	14,238.69	9,320.00	22.76	95.78	94.53	-64.92	2,223.80	3,756.47	3,672.22	84.25	44.587	
6,500.00	6,494.52	14,238.69	9,320.00	23.12	95.78	94.53	-64.92	2,223.80	3,678.80	3,593.18	85.62	42.969	
6,600.00	6,594.52	14,238.69	9,320.00	23.48	95.78	94.53	-64.92	2,223.80	3,602.23	3,515.20	87.03	41.391	
6,700.00	6,694.52	14,238.69	9,320.00	23.83	95.78	94.53	-64.92	2,223.80	3,526.83	3,438.34	88.49	39.856	
6,800.00	6,794.52	14,238.69	9,320.00	24.19	95.78	94.53	-64.92	2,223.80	3,452.69	3,362.69	90.00	38.365	
6,900.00	6,894.52	14,238.69	9,320.00	24.54	95.78	94.53	-64.92	2,223.80	3,379.88	3,288.33	91.55	36.919	
6,982.52	6,977.04	14,238.69	9,320.00	24.84	95.78	94.53	-64.92	2,223.80	3,320.86	3,227.99	92.87	35.759	
7,000.00	6,994.52	14,238.69	9,320.00	24.90	95.78	94.52	-64.92	2,223.80	3,308.47	3,215.32	93.15	35.519	
7,050.00	7,044.37	14,238.69	9,320.00	25.05	95.78	94.43	-64.92	2,223.80	3,273.23	3,179.28	93.95	34.842	
7,100.00	7,093.70	14,238.69	9,320.00	25.21	95.78	94.23	-64.92	2,223.80	3,238.49	3,143.75	94.74	34.183	
7,150.00	7,142.15	14,238.69	9,320.00	25.35	95.78	93.93	-64.92	2,223.80	3,204.55	3,109.02	95.53	33.546	
7,200.00	7,189.34	14,238.69	9,320.00	25.49	95.78	93.53	-64.92	2,223.80	3,171.67	3,075.38	96.29	32.937	
7,250.00	7,234.91	14,238.69	9,320.00	25.63	95.78	93.03	-64.92	2,223.80	3,140.16	3,043.12	97.04	32.359	
7,300.00	7,278.52	14,238.69	9,320.00	25.75	95.78	92.43	-64.92	2,223.80	3,110.30	3,012.54	97.76	31.816	
7,350.00	7,319.84	14,238.69	9,320.00	25.86	95.78	91.74	-64.92	2,223.80	3,082.36	2,983.91	98.44	31.311	
7,400.00	7,358.55	14,238.69	9,320.00	25.97	95.78	90.97	-64.92	2,223.80	3,056.62	2,957.53	99.09	30.847	
7,450.00	7,394.36	14,237.68	9,320.00	26.08	95.76	90.13	-65.93	2,223.80	3,033.32	2,933.64	99.68	30.431	
7,500.00	7,426.98	14,200.18	9,320.00	26.22	95.18	90.13	-103.80	2,223.71	3,012.46	2,912.66	99.80	30.184	
7,550.00	7,456.19	14,159.25	9,320.00	26.37	94.55	90.13	-144.36	2,223.62	2,993.94	2,894.11	99.84	29.989	
7,600.00	7,481.75	14,116.30	9,320.00	26.54	93.88	90.13	-187.32	2,223.51	2,977.86	2,878.06	99.80	29.840	
7,650.00	7,503.46	14,071.28	9,320.00	26.71	93.18	90.13	-232.34	2,223.41	2,964.26	2,864.58	99.68	29.738	
7,700.00	7,521.17	14,024.54	9,320.00	26.89	92.46	90.13	-279.08	2,223.30	2,953.22	2,853.72	99.49	29.683	
7,750.00	7,534.74	13,976.43	9,320.00	27.09	91.72	90.13	-327.19	2,223.19	2,944.76	2,845.52	99.23	29.675	
7,800.00	7,544.07	13,927.32	9,320.00	27.30	90.96	90.13	-376.29	2,223.07	2,938.91	2,840.00	98.91	29.712	
7,850.00	7,549.08	13,877.59	9,320.00	27.52	90.20	90.13	-426.02	2,222.96	2,935.70	2,837.17	98.53	29.796	
7,882.52	7,550.00	13,845.09	9,320.00	27.67	89.70	90.13	-458.52	2,222.88	2,935.03	2,836.79	98.25	29.874	
7,900.00	7,550.00	13,827.61	9,320.00	27.75	89.43	90.13	-476.01	2,222.84	2,934.97	2,836.88	98.09	29.921	
8,000.00	7,550.00	13,727.61	9,320.00	28.27	87.90	90.13	-576.00	2,222.61	2,934.64	2,837.40	97.24	30.178	
8,100.00	7,550.00	13,627.61	9,320.00	28.88	86.37	90.13	-676.00	2,222.37	2,934.31	2,837.83	96.47	30.416	
8,200.00	7,550.00	13,527.61	9,320.00	29.57	84.84	90.13	-776.00	2,222.14	2,933.97	2,838.20	95.77	30.635	
8,300.00	7,550.00	13,427.61	9,320.00	30.34	83.32	90.13	-876.00	2,221.90	2,933.64	2,838.50	95.14	30.835	
8,400.00	7,550.00	13,327.61	9,320.00	31.17	81.81	90.13	-976.00	2,221.67	2,933.31	2,838.74	94.57	31.017	
8,500.00	7,550.00	13,227.61	9,320.00	32.07	80.30	90.13	-1,076.00	2,221.44	2,932.97	2,838.92	94.06	31.182	
8,600.00	7,550.00	13,127.62	9,320.00	33.03	78.80	90.13	-1,176.00	2,221.20	2,932.64	2,839.04	93.60	31.331	
8,700.00	7,550.00	13,027.62	9,320.00	34.04	77.30	90.13	-1,276.00	2,220.97	2,932.31	2,839.12	93.19	31.465	
8,800.00	7,550.00	12,927.62	9,320.00	35.09	75.81	90.13	-1,375.99	2,220.73	2,931.98	2,839.14	92.83	31.583	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Energy Services
Anticollision Report



Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Reference Site: Warren 25-23S-27E RB Fed COM
Site Error: 0.00 usft
Reference Well: #121H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM Conroe
Offset TVD Reference: Offset Datum

Offset Design Warren 25-23S-27E RB Fed COM - #203H - Wellbore #1 - Design #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
8,900.00	7,550.00	12,827.62	9,320.00	36.20	74.33	90.13	-1,475.99	2,220.50	2,931.64	2,839.13	92.52	31.688	
9,000.00	7,550.00	12,727.62	9,320.00	37.34	72.85	90.13	-1,575.99	2,220.27	2,931.31	2,839.07	92.24	31.779	
9,100.00	7,550.00	12,627.62	9,320.00	38.53	71.39	90.13	-1,675.99	2,220.03	2,930.98	2,838.98	92.00	31.858	
9,200.00	7,550.00	12,527.62	9,320.00	39.74	69.93	90.13	-1,775.99	2,219.80	2,930.64	2,838.84	91.80	31.924	
9,300.00	7,550.00	12,427.62	9,320.00	40.99	68.48	90.13	-1,875.99	2,219.56	2,930.31	2,838.68	91.63	31.980	
9,400.00	7,550.00	12,327.62	9,320.00	42.26	67.04	90.13	-1,975.99	2,219.33	2,929.98	2,838.49	91.49	32.024	
9,500.00	7,550.00	12,227.62	9,320.00	43.56	65.61	90.13	-2,075.99	2,219.10	2,929.65	2,838.26	91.39	32.058	
9,600.00	7,550.00	12,127.62	9,320.00	44.89	64.19	90.13	-2,175.99	2,218.86	2,929.31	2,838.00	91.31	32.081	
9,700.00	7,550.00	12,027.62	9,320.00	46.23	62.78	90.13	-2,275.98	2,218.63	2,928.98	2,837.72	91.26	32.095	
9,800.00	7,550.00	11,927.63	9,320.00	47.60	61.38	90.13	-2,375.98	2,218.39	2,928.65	2,837.41	91.24	32.099	
9,900.00	7,550.00	11,827.63	9,320.00	48.98	60.00	90.13	-2,475.98	2,218.16	2,928.31	2,837.07	91.24	32.094	
10,000.00	7,550.00	11,727.63	9,320.00	50.38	58.63	90.13	-2,575.98	2,217.93	2,927.98	2,836.71	91.27	32.079	
10,100.00	7,550.00	11,627.63	9,320.00	51.80	57.28	90.13	-2,675.98	2,217.69	2,927.65	2,836.32	91.33	32.056	
10,200.00	7,550.00	11,527.63	9,320.00	53.23	55.94	90.13	-2,775.98	2,217.46	2,927.32	2,835.90	91.41	32.023	
10,300.00	7,550.00	11,427.63	9,320.00	54.67	54.62	90.13	-2,875.98	2,217.22	2,926.98	2,835.46	91.52	31.981	
10,400.00	7,550.00	11,327.63	9,320.00	56.12	53.32	90.13	-2,975.98	2,216.99	2,926.65	2,834.99	91.66	31.930	
10,500.00	7,550.00	11,227.63	9,320.00	57.59	52.04	90.13	-3,075.98	2,216.76	2,926.32	2,834.50	91.82	31.870	
10,600.00	7,550.00	11,127.63	9,320.00	59.06	50.78	90.13	-3,175.97	2,216.52	2,925.99	2,833.97	92.01	31.800	
10,700.00	7,550.00	11,027.63	9,320.00	60.54	49.54	90.13	-3,275.97	2,216.29	2,925.65	2,833.42	92.23	31.721	
10,800.00	7,550.00	10,927.63	9,320.00	62.04	48.33	90.13	-3,375.97	2,216.05	2,925.32	2,832.84	92.48	31.632	
10,900.00	7,550.00	7,566.57	7,538.00	63.54	27.53	126.86	-5,206.41	2,211.77	2,893.87	2,812.34	81.53	35.496	
11,000.00	7,550.00	7,566.57	7,538.00	65.05	27.53	125.24	-5,206.41	2,211.77	2,834.86	2,751.34	83.52	33.943	
11,100.00	7,550.00	7,566.57	7,538.00	66.56	27.53	123.56	-5,206.41	2,211.77	2,778.20	2,692.62	85.58	32.464	
11,200.00	7,550.00	7,566.57	7,538.00	68.08	27.53	121.81	-5,206.41	2,211.77	2,724.04	2,636.34	87.70	31.062	
11,300.00	7,550.00	7,566.57	7,538.00	69.61	27.53	119.99	-5,206.41	2,211.77	2,672.52	2,582.65	89.87	29.737	
11,400.00	7,550.00	7,566.57	7,538.00	71.15	27.53	118.10	-5,206.41	2,211.77	2,623.80	2,531.71	92.09	28.492	
11,500.00	7,550.00	7,566.57	7,538.00	72.69	27.53	116.14	-5,206.41	2,211.77	2,578.04	2,483.70	94.34	27.327	
11,600.00	7,550.00	7,566.57	7,538.00	74.23	27.53	114.11	-5,206.41	2,211.77	2,535.40	2,438.79	96.61	26.243	
11,700.00	7,550.00	7,566.57	7,538.00	75.78	27.53	112.02	-5,206.41	2,211.77	2,496.04	2,397.15	98.90	25.239	
11,800.00	7,550.00	7,566.57	7,538.00	77.33	27.53	109.86	-5,206.41	2,211.77	2,460.12	2,358.95	101.17	24.316	
11,900.00	7,550.00	7,566.57	7,538.00	78.89	27.53	107.64	-5,206.41	2,211.77	2,427.79	2,324.36	103.43	23.473	
12,000.00	7,550.00	7,566.57	7,538.00	80.45	27.53	105.37	-5,206.41	2,211.77	2,399.19	2,293.55	105.65	22.710	
12,100.00	7,550.00	7,566.57	7,538.00	82.02	27.53	103.04	-5,206.41	2,211.77	2,374.47	2,266.66	107.81	22.025	
12,200.00	7,550.00	7,566.57	7,538.00	83.59	27.53	100.67	-5,206.41	2,211.77	2,353.73	2,243.84	109.90	21.418	
12,300.00	7,550.00	7,566.57	7,538.00	85.16	27.53	98.26	-5,206.41	2,211.77	2,337.10	2,225.21	111.90	20.887	
12,381.32	7,550.00	7,566.57	7,538.00	86.44	27.53	96.28	-5,206.41	2,211.77	2,326.66	2,213.22	113.44	20.510 CC, ES, SF	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Energy Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Reference Site: Warren 25-23S-27E RB Fed COM
Site Error: 0.00 usft
Reference Well: #121H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM Conroe
Offset TVD Reference: Offset Datum

Offset Design Warren 25-23S-27E RB Fed COM - #205H - Wellbore #1 - Design #3														Offset Site Error:	0.00 usft
Survey Program: 0-MWD														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance		Warning							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
0.00	0.00	0.00	0.00	0.00	0.00	89.89	0.06	30.04	30.04						
100.00	100.00	100.00	100.00	0.13	0.13	89.89	0.06	30.04	30.04	29.78	0.25	118.025			
200.00	200.00	200.00	200.00	0.49	0.49	89.89	0.06	30.04	30.04	29.07	0.97	30.922			
300.00	300.00	300.00	300.00	0.84	0.84	89.89	0.06	30.04	30.04	28.35	1.69	17.791			
400.00	400.00	400.00	400.00	1.20	1.20	89.89	0.06	30.04	30.04	27.63	2.41	12.488			
500.00	500.00	500.00	500.00	1.56	1.56	89.89	0.06	30.04	30.04	26.92	3.12	9.621			
600.00	600.00	600.00	600.00	1.92	1.92	89.89	0.06	30.04	30.04	26.20	3.84	7.824			
700.00	700.00	700.00	700.00	2.28	2.28	89.89	0.06	30.04	30.04	25.48	4.56	6.593			
800.00	800.00	800.00	800.00	2.64	2.64	89.89	0.06	30.04	30.04	24.77	5.27	5.697 CC, ES			
900.00	899.99	899.83	899.82	2.99	2.99	89.32	1.34	30.30	31.19	25.20	5.99	5.210			
1,000.00	999.91	999.57	999.48	3.35	3.35	87.83	5.16	31.09	34.66	27.96	6.70	5.174			
1,066.88	1,066.66	1,067.68	1,065.97	3.59	3.60	86.58	9.14	31.90	38.29	31.10	7.18	5.332			
1,100.00	1,099.70	1,100.76	1,098.94	3.71	3.72	85.96	11.40	32.36	40.35	32.93	7.42	5.439			
1,200.00	1,199.46	1,200.96	1,198.50	4.07	4.08	84.42	18.23	33.76	46.60	38.46	8.14	5.726			
1,300.00	1,299.21	1,298.83	1,298.05	4.43	4.43	83.24	25.05	35.16	52.87	44.02	8.85	5.973			
1,400.00	1,398.97	1,401.37	1,397.60	4.80	4.81	82.32	31.88	36.56	59.17	49.58	9.59	6.172			
1,500.00	1,498.73	1,501.57	1,497.16	5.16	5.17	81.57	38.71	37.96	65.47	55.16	10.32	6.347			
1,600.00	1,598.48	1,601.77	1,596.71	5.53	5.54	80.95	45.53	39.36	71.79	60.74	11.05	6.500			
1,700.00	1,698.24	1,701.98	1,696.27	5.90	5.91	80.43	52.36	40.76	78.11	66.34	11.78	6.633			
1,800.00	1,797.99	1,802.18	1,795.82	6.27	6.28	79.99	59.19	42.16	84.44	71.93	12.51	6.750			
1,900.00	1,897.75	1,902.38	1,895.37	6.64	6.65	79.62	66.01	43.56	90.77	77.53	13.24	6.855			
2,000.00	1,997.51	2,002.58	1,994.93	7.00	7.02	79.29	72.84	44.96	97.11	83.13	13.98	6.948			
2,100.00	2,097.26	2,102.79	2,094.48	7.38	7.39	79.00	79.67	46.36	103.45	88.73	14.71	7.032			
2,200.00	2,197.02	2,202.99	2,194.04	7.75	7.76	78.74	86.49	47.76	109.79	94.34	15.45	7.107			
2,300.00	2,296.77	2,303.19	2,293.59	8.12	8.13	78.52	93.32	49.16	116.13	99.94	16.18	7.176			
2,400.00	2,396.53	2,403.39	2,393.14	8.49	8.50	78.31	100.15	50.56	122.47	105.55	16.92	7.238			
2,500.00	2,496.29	2,503.60	2,492.70	8.86	8.87	78.13	106.97	51.96	128.82	111.16	17.66	7.296			
2,600.00	2,596.04	2,596.76	2,592.83	9.23	9.22	78.03	113.64	53.32	135.08	116.71	18.37	7.354			
2,700.00	2,695.80	2,698.05	2,694.00	9.60	9.59	78.73	118.22	54.26	140.50	121.39	19.11	7.353			
2,800.00	2,795.55	2,799.29	2,795.21	9.97	9.95	80.35	120.18	54.67	144.95	125.12	19.84	7.307			
2,900.00	2,895.31	2,900.62	2,895.31	10.35	10.30	82.58	120.26	54.68	148.89	128.34	20.56	7.243			
3,000.00	2,995.07	3,000.86	2,995.07	10.72	10.66	84.72	120.26	54.68	153.02	131.75	21.27	7.193			
3,100.00	3,094.82	3,101.11	3,094.82	11.09	11.01	86.74	120.26	54.68	157.36	135.37	21.99	7.166			
3,133.60	3,128.34	3,132.41	3,128.34	11.21	11.12	87.39	120.26	54.68	158.85	136.63	22.22	7.149			
3,200.00	3,194.62	3,201.31	3,194.62	11.46	11.36	88.50	120.26	54.68	161.49	138.79	22.70	7.113			
3,300.00	3,294.54	3,301.39	3,294.54	11.82	11.72	89.53	120.26	54.68	164.11	140.70	23.41	7.009			
3,400.00	3,394.52	3,401.40	3,394.52	12.18	12.07	89.87	120.26	54.68	165.00	140.88	24.12	6.841			
3,400.48	3,395.00	3,400.93	3,395.00	12.18	12.07	89.87	120.26	54.68	165.00	140.88	24.12	6.841			
3,500.00	3,494.52	3,501.40	3,494.52	12.52	12.42	89.87	120.26	54.68	165.00	140.18	24.82	6.647			
3,600.00	3,594.52	3,601.40	3,594.52	12.87	12.78	89.87	120.26	54.68	165.00	139.47	25.53	6.463			
3,700.00	3,694.52	3,701.40	3,694.52	13.22	13.13	89.87	120.26	54.68	165.00	138.77	26.23	6.289			
3,800.00	3,794.52	3,801.40	3,794.52	13.57	13.49	89.87	120.26	54.68	165.00	138.06	26.94	6.125			
3,900.00	3,894.52	3,901.40	3,894.52	13.92	13.84	89.87	120.26	54.68	165.00	137.35	27.65	5.968			
4,000.00	3,994.52	4,001.41	3,994.52	14.27	14.20	89.87	120.26	54.68	165.00	136.65	28.35	5.819			
4,100.00	4,094.52	4,101.41	4,094.52	14.62	14.55	89.87	120.26	54.68	165.00	135.94	29.06	5.677			
4,200.00	4,194.52	4,201.41	4,194.52	14.98	14.91	89.87	120.26	54.68	165.00	135.23	29.77	5.542			
4,300.00	4,294.52	4,301.41	4,294.52	15.33	15.26	89.87	120.26	54.68	165.00	134.52	30.48	5.413			
4,400.00	4,394.52	4,401.41	4,394.52	15.68	15.62	89.87	120.26	54.68	165.00	133.81	31.19	5.290			
4,500.00	4,494.52	4,501.41	4,494.52	16.03	15.97	89.87	120.26	54.68	165.00	133.10	31.90	5.173			
4,600.00	4,594.52	4,601.41	4,594.52	16.38	16.33	89.87	120.26	54.68	165.00	132.39	32.61	5.060			
4,700.00	4,694.52	4,701.41	4,694.52	16.74	16.68	89.87	120.26	54.68	165.00	131.68	33.32	4.952			
4,800.00	4,794.52	4,801.41	4,794.52	17.09	17.04	89.87	120.26	54.68	165.00	130.97	34.03	4.849			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Energy Services Anticollision Report



Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Reference Site: Warren 25-23S-27E RB Fed COM
Site Error: 0.00 usft
Reference Well: #121H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM Conroe
Offset TVD Reference: Offset Datum

Offset Design Warren 25-23S-27E RB Fed COM - #205H - Wellbore #1 - Design #3													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
4,900.00	4,894.52	4,901.41	4,894.52	17.44	17.40	89.87	120.26	54.68	165.00	130.26	34.74	4.750		
5,000.00	4,994.52	5,001.41	4,994.52	17.80	17.75	89.87	120.26	54.68	165.00	129.55	35.45	4.655		
5,100.00	5,094.52	5,101.41	5,094.52	18.15	18.11	89.87	120.26	54.68	165.00	128.84	36.16	4.563		
5,200.00	5,194.52	5,201.41	5,194.52	18.51	18.46	89.87	120.26	54.68	165.00	128.13	36.87	4.475		
5,300.00	5,294.52	5,301.41	5,294.52	18.86	18.82	89.87	120.26	54.68	165.00	127.42	37.58	4.390		
5,400.00	5,394.52	5,401.41	5,394.52	19.21	19.18	89.87	120.26	54.68	165.00	126.70	38.30	4.309		
5,500.00	5,494.52	5,501.41	5,494.52	19.57	19.53	89.87	120.26	54.68	165.00	125.99	39.01	4.230		
5,600.00	5,594.52	5,601.41	5,594.52	19.92	19.89	89.87	120.26	54.68	165.00	125.28	39.72	4.154		
5,700.00	5,694.52	5,701.41	5,694.52	20.28	20.25	89.87	120.26	54.68	165.00	124.57	40.43	4.081		
5,800.00	5,794.52	5,801.41	5,794.52	20.63	20.60	89.87	120.26	54.68	165.00	123.86	41.14	4.010		
5,900.00	5,894.52	5,901.41	5,894.52	20.99	20.96	89.87	120.26	54.68	165.00	123.14	41.86	3.942		
6,000.00	5,994.52	6,001.41	5,994.52	21.34	21.32	89.87	120.26	54.68	165.00	122.43	42.57	3.876		
6,100.00	6,094.52	6,101.41	6,094.52	21.70	21.67	89.87	120.26	54.68	165.00	121.72	43.28	3.812		
6,200.00	6,194.52	6,201.41	6,194.52	22.05	22.03	89.87	120.26	54.68	165.00	121.01	43.99	3.750		
6,300.00	6,294.52	6,301.41	6,294.52	22.41	22.39	89.87	120.26	54.68	165.00	120.29	44.71	3.691		
6,400.00	6,394.52	6,401.41	6,394.52	22.76	22.75	89.87	120.26	54.68	165.00	119.58	45.42	3.633		
6,500.00	6,494.52	6,501.41	6,494.52	23.12	23.10	89.87	120.26	54.68	165.00	118.87	46.13	3.576		
6,600.00	6,594.52	6,601.41	6,594.52	23.48	23.46	89.87	120.26	54.68	165.00	118.15	46.85	3.522		
6,700.00	6,694.52	6,701.41	6,694.52	23.83	23.82	89.87	120.26	54.68	165.00	117.44	47.56	3.469		
6,800.00	6,794.52	6,801.41	6,794.52	24.19	24.17	89.87	120.26	54.68	165.00	116.72	48.28	3.418		
6,900.00	6,894.52	6,901.41	6,894.52	24.54	24.53	89.87	120.26	54.68	165.00	116.01	48.99	3.368		
6,982.52	6,977.04	6,981.11	6,977.04	24.84	24.82	89.87	120.26	54.68	165.00	115.43	49.57	3.329		
6,982.80	6,977.33	6,981.40	6,977.33	24.84	24.82	89.87	120.26	54.68	165.00	115.43	49.57	3.329		
7,000.00	6,994.52	7,001.41	6,994.52	24.90	24.89	89.78	120.26	54.68	165.00	115.30	49.70	3.320		
7,050.00	7,044.37	7,048.44	7,044.37	25.05	25.06	88.49	120.26	54.68	165.05	115.02	50.03	3.299		
7,100.00	7,093.70	7,102.23	7,093.70	25.21	25.25	85.71	120.26	54.68	165.44	115.07	50.37	3.284 SF		
7,150.00	7,142.15	7,146.22	7,142.15	25.35	25.41	81.49	120.26	54.68	166.79	116.11	50.68	3.291		
7,200.00	7,189.34	7,206.59	7,189.34	25.49	25.62	75.99	120.26	54.68	169.98	118.94	51.04	3.330		
7,250.00	7,234.91	7,238.98	7,234.91	25.63	25.74	69.49	120.26	54.68	176.05	124.75	51.30	3.432		
7,300.00	7,278.52	7,282.60	7,278.52	25.75	25.89	62.42	120.26	54.68	185.97	134.38	51.59	3.605		
7,350.00	7,319.84	7,323.91	7,319.84	25.86	26.04	55.27	120.26	54.68	200.51	148.65	51.86	3.866		
7,400.00	7,358.55	7,362.62	7,358.55	25.97	26.18	48.48	120.26	54.68	220.02	167.91	52.11	4.222		
7,450.00	7,394.36	7,401.57	7,394.36	26.08	26.32	42.34	120.26	54.68	244.50	192.14	52.35	4.670		
7,500.00	7,426.98	7,431.06	7,426.98	26.22	26.42	36.98	120.26	54.68	273.64	221.09	52.55	5.207		
7,550.00	7,456.19	7,460.26	7,456.19	26.37	26.53	32.41	120.26	54.68	306.97	254.25	52.72	5.822		
7,600.00	7,481.75	7,485.82	7,481.75	26.54	26.62	28.56	120.26	54.68	343.97	291.10	52.88	6.505		
7,650.00	7,503.46	7,507.54	7,503.46	26.71	26.70	25.34	120.26	54.68	384.08	331.08	53.00	7.247		
7,700.00	7,521.17	7,525.25	7,521.17	26.89	26.76	22.64	120.26	54.68	426.76	373.67	53.10	8.038		
7,750.00	7,534.74	7,538.82	7,534.74	27.09	26.81	20.38	120.26	54.68	471.50	418.33	53.17	8.868		
7,800.00	7,544.07	7,548.14	7,544.07	27.30	26.84	18.48	120.26	54.68	517.78	464.57	53.21	9.730		
7,850.00	7,549.08	7,553.15	7,549.08	27.52	26.86	16.87	120.26	54.68	565.14	511.91	53.24	10.615		
7,882.52	7,550.00	7,554.07	7,550.00	27.67	26.86	15.96	120.26	54.68	596.30	543.06	53.24	11.200		
7,900.00	7,550.00	7,554.07	7,550.00	27.75	26.86	15.51	120.26	54.68	613.12	559.88	53.24	11.515		
8,000.00	7,550.00	7,554.07	7,550.00	28.27	26.86	13.33	120.26	54.68	709.94	656.70	53.25	13.333		
8,100.00	7,550.00	7,554.07	7,550.00	28.88	26.86	11.68	120.26	54.68	807.54	754.29	53.25	15.165		
8,200.00	7,550.00	7,554.07	7,550.00	29.57	26.86	10.39	120.26	54.68	905.66	852.40	53.26	17.005		
8,300.00	7,550.00	7,554.07	7,550.00	30.34	26.86	9.35	120.26	54.68	1,004.15	950.89	53.27	18.852		
8,400.00	7,550.00	7,554.07	7,550.00	31.17	26.86	8.50	120.26	54.68	1,102.92	1,049.64	53.27	20.702		
8,500.00	7,550.00	7,554.07	7,550.00	32.07	26.86	7.78	120.26	54.68	1,201.88	1,148.60	53.29	22.556		
8,600.00	7,550.00	7,554.07	7,550.00	33.03	26.86	7.18	120.26	54.68	1,301.01	1,247.71	53.30	24.410		
8,700.00	7,550.00	7,554.07	7,550.00	34.04	26.86	6.66	120.26	54.68	1,400.26	1,346.95	53.31	26.266		
8,800.00	7,550.00	7,554.07	7,550.00	35.09	26.86	6.21	120.26	54.68	1,499.61	1,446.28	53.32	28.122		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Energy Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Reference Site: Warren 25-23S-27E RB Fed COM
Site Error: 0.00 usft
Reference Well: #121H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM Conroe
Offset TVD Reference: Offset Datum

Offset Design Warren 25-23S-27E RB Fed COM - #205H - Wellbore #1 - Design #3													Offset Site Error: 0.00 usft
Survey Program: 0-MWD													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
8,900.00	7,550.00	7,554.07	7,550.00	36.20	26.86	5.82	120.26	54.68	1,599.04	1,545.70	53.34	29.978	
9,000.00	7,550.00	7,554.07	7,550.00	37.34	26.86	5.47	120.26	54.68	1,698.54	1,645.18	53.36	31.834	
9,100.00	7,550.00	7,554.07	7,550.00	38.53	26.86	5.16	120.26	54.68	1,798.09	1,744.72	53.37	33.689	
9,200.00	7,550.00	11,008.42	9,350.00	39.74	44.65	89.89	-1,769.92	223.04	1,829.97	1,787.36	42.61	42.947	
9,300.00	7,550.00	11,108.42	9,350.00	40.99	45.77	89.89	-1,869.92	223.23	1,829.97	1,786.19	43.78	41.798	
9,400.00	7,550.00	11,208.42	9,350.00	42.26	46.92	89.89	-1,969.92	223.42	1,829.98	1,784.99	44.98	40.682	
9,500.00	7,550.00	11,308.42	9,350.00	43.56	48.11	89.89	-2,069.92	223.61	1,829.98	1,783.76	46.21	39.600	
9,600.00	7,550.00	11,408.42	9,350.00	44.89	49.31	89.89	-2,169.92	223.80	1,829.98	1,782.51	47.47	38.553	
9,700.00	7,550.00	11,508.42	9,350.00	46.23	50.55	89.89	-2,269.92	223.99	1,829.98	1,781.23	48.74	37.542	
9,800.00	7,550.00	11,608.42	9,350.00	47.60	51.81	89.89	-2,369.92	224.18	1,829.98	1,779.94	50.04	36.568	
9,900.00	7,550.00	11,708.42	9,350.00	48.98	53.09	89.89	-2,469.92	224.37	1,829.98	1,778.62	51.36	35.627	
10,000.00	7,550.00	11,808.42	9,350.00	50.38	54.39	89.89	-2,569.92	224.56	1,829.98	1,777.28	52.70	34.722	
10,100.00	7,550.00	11,908.42	9,350.00	51.80	55.71	89.89	-2,669.92	224.75	1,829.98	1,775.92	54.06	33.852	
10,200.00	7,550.00	12,008.42	9,350.00	53.23	57.04	89.89	-2,769.92	224.94	1,829.98	1,774.55	55.43	33.014	
10,300.00	7,550.00	12,108.42	9,350.00	54.67	58.40	89.89	-2,869.92	225.13	1,829.98	1,773.17	56.82	32.208	
10,400.00	7,550.00	12,208.42	9,350.00	56.12	59.77	89.89	-2,969.92	225.32	1,829.98	1,771.77	58.22	31.433	
10,500.00	7,550.00	12,308.42	9,350.00	57.59	61.15	89.89	-3,069.92	225.51	1,829.99	1,770.35	59.63	30.688	
10,600.00	7,550.00	12,408.42	9,350.00	59.06	62.54	89.89	-3,169.92	225.70	1,829.99	1,768.93	61.06	29.971	
10,700.00	7,550.00	12,508.42	9,350.00	60.54	63.95	89.89	-3,269.92	225.89	1,829.99	1,767.49	62.49	29.282	
10,800.00	7,550.00	12,608.42	9,350.00	62.04	65.37	89.89	-3,369.92	226.08	1,829.99	1,766.05	63.94	28.620	
10,900.00	7,550.00	12,708.42	9,350.00	63.54	66.80	89.89	-3,469.92	226.27	1,829.99	1,764.59	65.40	27.982	
11,000.00	7,550.00	12,808.42	9,350.00	65.05	68.25	89.89	-3,569.92	226.46	1,829.99	1,763.12	66.86	27.368	
11,100.00	7,550.00	12,908.42	9,350.00	66.56	69.70	89.89	-3,669.92	226.65	1,829.99	1,761.65	68.34	26.778	
11,200.00	7,550.00	13,008.42	9,350.00	68.08	71.16	89.89	-3,769.92	226.84	1,829.99	1,760.17	69.82	26.209	
11,300.00	7,550.00	13,108.42	9,350.00	69.61	72.63	89.89	-3,869.92	227.03	1,829.99	1,758.68	71.31	25.662	
11,400.00	7,550.00	13,208.42	9,350.00	71.15	74.10	89.89	-3,969.92	227.22	1,829.99	1,757.18	72.81	25.134	
11,500.00	7,550.00	13,308.42	9,350.00	72.69	75.59	89.89	-4,069.92	227.41	1,829.99	1,755.68	74.31	24.625	
11,600.00	7,550.00	13,408.42	9,350.00	74.23	77.08	89.89	-4,169.92	227.60	1,829.99	1,754.17	75.82	24.135	
11,700.00	7,550.00	13,508.42	9,350.00	75.78	78.57	89.89	-4,269.91	227.79	1,830.00	1,752.66	77.34	23.662	
11,800.00	7,550.00	13,608.42	9,350.00	77.33	80.08	89.89	-4,369.91	227.98	1,830.00	1,751.14	78.86	23.205	
11,900.00	7,550.00	13,708.42	9,350.00	78.89	81.59	89.89	-4,469.91	228.17	1,830.00	1,749.61	80.39	22.765	
12,000.00	7,550.00	13,808.42	9,350.00	80.45	83.10	89.89	-4,569.91	228.36	1,830.00	1,748.08	81.92	22.339	
12,100.00	7,550.00	13,908.42	9,350.00	82.02	84.62	89.89	-4,669.91	228.55	1,830.00	1,746.54	83.46	21.928	
12,200.00	7,550.00	14,008.42	9,350.00	83.59	86.15	89.89	-4,769.91	228.74	1,830.00	1,745.00	85.00	21.530	
12,300.00	7,550.00	14,108.42	9,350.00	85.16	87.68	89.89	-4,869.91	228.93	1,830.00	1,743.46	86.54	21.146	
12,381.32	7,550.00	14,189.74	9,350.00	86.44	88.77	89.89	-4,951.23	229.09	1,830.00	1,742.51	87.49	20.916	



MS Energy Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Reference Site: Warren 25-23S-27E RB Fed COM
Site Error: 0.00 usft
Reference Well: #121H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM Conroe
Offset TVD Reference: Offset Datum

Offset Design Warren 25-23S-27E RB Fed COM - #206H - Wellbore #1 - Design #1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	161.02	-5,561.75	1,912.78	5,881.49				
100.00	100.00	88.00	88.00	0.13	0.11	161.02	-5,561.75	1,912.78	5,881.48	5,881.24	0.24	N/A	
200.00	200.00	188.00	188.00	0.49	0.44	161.02	-5,561.75	1,912.78	5,881.48	5,880.55	0.93	6,334.788	
300.00	300.00	288.00	288.00	0.84	0.80	161.02	-5,561.75	1,912.78	5,881.48	5,879.84	1.65	3,574.532	
400.00	400.00	388.00	388.00	1.20	1.16	161.02	-5,561.75	1,912.78	5,881.48	5,879.12	2.36	2,489.697	
500.00	500.00	488.00	488.00	1.56	1.52	161.02	-5,561.75	1,912.78	5,881.48	5,878.40	3.08	1,910.024	
600.00	600.00	588.00	588.00	1.92	1.88	161.02	-5,561.75	1,912.78	5,881.48	5,877.68	3.80	1,549.302	
700.00	700.00	688.00	688.00	2.28	2.24	161.02	-5,561.75	1,912.78	5,881.48	5,876.97	4.51	1,303.186	
800.00	800.00	1,334.80	1,333.33	2.64	4.57	161.18	-5,537.58	1,887.45	5,875.77	5,868.59	7.17	818.993	
900.00	899.99	1,434.37	1,432.36	2.99	4.94	161.22	-5,530.39	1,879.92	5,867.68	5,859.79	7.89	743.862	
1,000.00	999.91	1,534.16	1,531.59	3.35	5.32	161.25	-5,523.19	1,872.37	5,861.99	5,853.38	8.60	681.307	
1,066.88	1,066.66	1,600.97	1,598.04	3.59	5.57	161.27	-5,518.37	1,867.32	5,859.51	5,850.43	9.09	644.953	
1,100.00	1,099.70	1,634.07	1,630.96	3.71	5.69	161.27	-5,515.98	1,864.82	5,858.56	5,849.23	9.32	628.306	
1,200.00	1,199.46	1,734.01	1,730.35	4.07	6.07	161.29	-5,508.77	1,857.26	5,855.66	5,845.61	10.05	582.727	
1,300.00	1,299.21	1,833.95	1,829.74	4.43	6.46	161.31	-5,501.56	1,849.70	5,852.77	5,841.99	10.77	543.184	
1,400.00	1,398.97	1,933.88	1,929.13	4.80	6.84	161.33	-5,494.35	1,842.14	5,849.87	5,838.37	11.50	508.571	
1,500.00	1,498.73	2,033.82	2,028.52	5.16	7.22	161.35	-5,487.14	1,834.59	5,846.98	5,834.75	12.23	478.029	
1,600.00	1,598.48	2,133.76	2,127.91	5.53	7.61	161.37	-5,479.92	1,827.03	5,844.09	5,831.13	12.96	450.888	
1,700.00	1,698.24	2,233.70	2,227.30	5.90	7.99	161.39	-5,472.71	1,819.47	5,841.20	5,827.51	13.69	426.615	
1,800.00	1,797.99	2,333.63	2,326.69	6.27	8.38	161.41	-5,465.50	1,811.91	5,838.31	5,823.89	14.42	404.782	
1,900.00	1,897.75	2,433.57	2,426.08	6.64	8.77	161.43	-5,458.29	1,804.36	5,835.42	5,820.26	15.16	385.040	
2,000.00	1,997.51	2,533.51	2,525.47	7.00	9.16	161.45	-5,451.08	1,796.80	5,832.53	5,816.64	15.89	367.106	
2,100.00	2,097.26	2,633.45	2,624.86	7.38	9.54	161.47	-5,443.87	1,789.24	5,829.64	5,813.02	16.62	350.743	
2,200.00	2,197.02	2,733.39	2,723.86	7.75	9.92	161.49	-5,436.66	1,781.68	5,826.75	5,809.40	17.35	334.380	
2,300.00	2,296.77	2,833.33	2,823.78	8.12	10.30	161.51	-5,429.45	1,774.12	5,823.86	5,805.79	18.08	318.017	
2,400.00	2,396.53	2,933.27	2,923.74	8.49	10.68	161.53	-5,422.24	1,766.56	5,820.97	5,802.18	18.81	301.654	
2,500.00	2,496.29	3,033.21	3,023.78	8.86	11.06	161.55	-5,415.03	1,759.00	5,818.08	5,798.57	19.54	285.291	
2,600.00	2,596.04	3,133.15	3,123.72	9.23	11.44	161.57	-5,407.82	1,751.44	5,815.19	5,795.06	20.27	268.928	
2,700.00	2,695.80	3,233.09	3,223.66	9.60	11.82	161.59	-5,400.61	1,743.88	5,812.30	5,791.55	21.00	252.565	
2,800.00	2,795.55	3,333.03	3,323.60	9.97	12.20	161.61	-5,393.40	1,736.32	5,809.41	5,788.04	21.73	236.202	
2,900.00	2,895.31	3,432.97	3,423.54	10.35	12.58	161.63	-5,386.19	1,728.76	5,806.52	5,784.53	22.46	219.839	
3,000.00	2,995.07	3,532.91	3,523.48	10.72	12.96	161.65	-5,378.98	1,721.20	5,803.63	5,781.02	23.19	203.476	
3,100.00	3,094.82	3,632.85	3,623.42	11.09	13.34	161.67	-5,371.77	1,713.64	5,800.74	5,777.51	23.92	187.113	
3,133.60	3,128.34	4,021.84	3,994.22	11.21	15.44	162.25	-5,286.95	1,624.80	5,737.53	5,711.88	25.65	223.659	
3,200.00	3,194.62	4,087.82	4,059.19	11.46	15.72	162.29	-5,279.04	1,616.52	5,731.03	5,704.88	26.15	219.142	
3,300.00	3,294.54	4,186.90	4,156.77	11.82	16.16	162.35	-5,267.16	1,604.07	5,719.28	5,692.38	26.90	212.609	
3,400.00	3,394.52	4,275.69	4,244.21	12.18	16.55	162.42	-5,255.28	1,592.91	5,705.20	5,677.59	27.61	206.656	
3,400.48	3,395.00	4,275.69	4,244.21	12.18	16.55	162.42	-5,255.28	1,592.91	5,705.12	5,677.52	27.61	206.640	
3,500.00	3,494.52	4,300.00	4,268.16	12.52	16.65	162.44	-5,253.66	1,589.91	5,690.61	5,662.53	28.08	202.683	
3,600.00	3,594.52	4,365.44	4,332.76	12.87	16.93	162.49	-5,246.48	1,582.39	5,676.80	5,648.11	28.69	197.862	
3,700.00	3,694.52	4,400.00	4,366.96	13.22	17.08	162.52	-5,242.99	1,578.74	5,664.09	5,634.90	29.19	194.027	
3,800.00	3,794.52	4,451.48	4,417.97	13.57	17.29	162.55	-5,238.20	1,573.72	5,652.34	5,622.59	29.75	189.990	
3,900.00	3,894.52	4,500.00	4,466.12	13.92	17.49	162.58	-5,234.12	1,569.44	5,641.60	5,611.30	30.30	186.208	
4,000.00	3,994.52	14,253.56	9,320.00	14.27	95.95	96.39	-66.38	1,551.76	5,593.38	5,535.27	58.11	96.258	
4,100.00	4,094.52	14,253.56	9,320.00	14.62	95.95	96.39	-66.38	1,551.76	5,498.03	5,439.48	58.55	93.900	
4,200.00	4,194.52	14,253.56	9,320.00	14.98	95.95	96.39	-66.38	1,551.76	5,402.86	5,343.85	59.01	91.556	
4,300.00	4,294.52	14,253.56	9,320.00	15.33	95.95	96.39	-66.38	1,551.76	5,307.86	5,248.37	59.49	89.225	
4,400.00	4,394.52	14,253.56	9,320.00	15.68	95.95	96.39	-66.38	1,551.76	5,213.05	5,153.07	59.98	86.909	
4,500.00	4,494.52	14,253.56	9,320.00	16.03	95.95	96.39	-66.38	1,551.76	5,118.44	5,057.94	60.50	84.608	
4,600.00	4,594.52	14,253.56	9,320.00	16.38	95.95	96.39	-66.38	1,551.76	5,024.03	4,963.00	61.03	82.323	
4,700.00	4,694.52	14,253.56	9,320.00	16.74	95.95	96.39	-66.38	1,551.76	4,929.85	4,868.27	61.58	80.054	
4,800.00	4,794.52	14,253.56	9,320.00	17.09	95.95	96.39	-66.38	1,551.76	4,835.90	4,773.74	62.16	77.802	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Energy Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Reference Site: Warren 25-23S-27E RB Fed COM
Site Error: 0.00 usft
Reference Well: #121H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM Conroe
Offset TVD Reference: Offset Datum

Offset Design Warren 25-23S-27E RB Fed COM - #206H - Wellbore #1 - Design #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,900.00	4,894.52	14,253.56	9,320.00	17.44	95.95	96.39	-66.38	1,551.76	4,742.19	4,679.44	62.75	75.567		
5,000.00	4,994.52	14,253.56	9,320.00	17.80	95.95	96.39	-66.38	1,551.76	4,648.75	4,585.38	63.38	73.351		
5,100.00	5,094.52	14,253.56	9,320.00	18.15	95.95	96.39	-66.38	1,551.76	4,555.59	4,491.57	64.02	71.154		
5,200.00	5,194.52	14,253.56	9,320.00	18.51	95.95	96.39	-66.38	1,551.76	4,462.73	4,398.03	64.70	68.977		
5,300.00	5,294.52	14,253.56	9,320.00	18.86	95.95	96.39	-66.38	1,551.76	4,370.17	4,304.77	65.40	66.820		
5,400.00	5,394.52	14,253.56	9,320.00	19.21	95.95	96.39	-66.38	1,551.76	4,277.96	4,211.82	66.14	64.685		
5,500.00	5,494.52	14,253.56	9,320.00	19.57	95.95	96.39	-66.38	1,551.76	4,186.10	4,119.20	66.90	62.572		
5,600.00	5,594.52	14,253.56	9,320.00	19.92	95.95	96.39	-66.38	1,551.76	4,094.62	4,026.92	67.70	60.482		
5,700.00	5,694.52	14,253.56	9,320.00	20.28	95.95	96.39	-66.38	1,551.76	4,003.55	3,935.02	68.53	58.416		
5,800.00	5,794.52	14,253.56	9,320.00	20.63	95.95	96.39	-66.38	1,551.76	3,912.92	3,843.51	69.41	56.376		
5,900.00	5,894.52	14,253.56	9,320.00	20.99	95.95	96.39	-66.38	1,551.76	3,822.75	3,752.43	70.32	54.361		
6,000.00	5,994.52	14,253.56	9,320.00	21.34	95.95	96.39	-66.38	1,551.76	3,733.09	3,661.81	71.28	52.374		
6,100.00	6,094.52	14,253.56	9,320.00	21.70	95.95	96.39	-66.38	1,551.76	3,643.96	3,571.68	72.28	50.415		
6,200.00	6,194.52	14,253.56	9,320.00	22.05	95.95	96.39	-66.38	1,551.76	3,555.41	3,482.08	73.33	48.485		
6,300.00	6,294.52	14,253.56	9,320.00	22.41	95.95	96.39	-66.38	1,551.76	3,467.49	3,393.06	74.43	46.587		
6,400.00	6,394.52	14,253.56	9,320.00	22.76	95.95	96.39	-66.38	1,551.76	3,380.23	3,304.65	75.59	44.721		
6,500.00	6,494.52	14,253.56	9,320.00	23.12	95.95	96.39	-66.38	1,551.76	3,293.70	3,216.91	76.80	42.888		
6,600.00	6,594.52	14,253.56	9,320.00	23.48	95.95	96.39	-66.38	1,551.76	3,207.96	3,129.89	78.07	41.091		
6,700.00	6,694.52	14,253.56	9,320.00	23.83	95.95	96.39	-66.38	1,551.76	3,123.06	3,043.65	79.40	39.331		
6,800.00	6,794.52	14,253.56	9,320.00	24.19	95.95	96.39	-66.38	1,551.76	3,039.08	2,958.27	80.81	37.609		
6,900.00	6,894.52	14,253.56	9,320.00	24.54	95.95	96.39	-66.38	1,551.76	2,956.09	2,873.81	82.28	35.927		
6,982.52	6,977.04	14,253.56	9,320.00	24.84	95.95	96.39	-66.38	1,551.76	2,888.43	2,804.88	83.55	34.571		
7,000.00	6,994.52	14,253.56	9,320.00	24.90	95.95	96.39	-66.38	1,551.76	2,874.18	2,790.36	83.82	34.288		
7,050.00	7,044.37	14,253.56	9,320.00	25.05	95.95	96.26	-66.38	1,551.76	2,833.55	2,748.93	84.62	33.486		
7,100.00	7,093.70	14,253.56	9,320.00	25.21	95.95	95.99	-66.38	1,551.76	2,793.35	2,707.92	85.43	32.699		
7,150.00	7,142.15	14,253.56	9,320.00	25.35	95.95	95.57	-66.38	1,551.76	2,753.91	2,667.67	86.24	31.932		
7,200.00	7,189.34	14,253.56	9,320.00	25.49	95.95	95.00	-66.38	1,551.76	2,715.58	2,628.53	87.06	31.191		
7,250.00	7,234.91	14,253.56	9,320.00	25.63	95.95	94.30	-66.38	1,551.76	2,678.72	2,590.84	87.88	30.482		
7,300.00	7,278.52	14,253.56	9,320.00	25.75	95.95	93.46	-66.38	1,551.76	2,643.64	2,554.96	88.69	29.809		
7,350.00	7,319.84	14,253.56	9,320.00	25.86	95.95	92.49	-66.38	1,551.76	2,610.71	2,521.24	89.48	29.178		
7,400.00	7,358.55	14,253.56	9,320.00	25.97	95.95	91.41	-66.38	1,551.76	2,580.27	2,490.03	90.24	28.593		
7,450.00	7,394.36	14,253.56	9,320.00	26.08	95.95	90.20	-66.38	1,551.76	2,552.63	2,461.65	90.98	28.059		
7,500.00	7,426.98	14,221.33	9,320.00	26.22	95.45	90.01	-98.61	1,551.76	2,527.89	2,436.63	91.26	27.700		
7,550.00	7,456.19	14,180.77	9,320.00	26.37	94.82	90.01	-139.17	1,551.75	2,505.90	2,414.51	91.40	27.418		
7,600.00	7,481.75	14,137.81	9,320.00	26.54	94.16	90.01	-182.13	1,551.74	2,486.77	2,395.32	91.45	27.192		
7,650.00	7,503.46	14,107.21	9,320.00	26.71	93.68	90.01	-227.15	1,551.74	2,470.59	2,379.00	91.59	26.973		
7,700.00	7,521.17	14,046.05	9,320.00	26.89	92.74	90.01	-273.89	1,551.73	2,457.45	2,366.13	91.32	26.909		
7,750.00	7,534.74	14,002.05	9,320.00	27.09	92.06	90.01	-322.00	1,551.72	2,447.40	2,356.21	91.19	26.838		
7,800.00	7,544.07	13,948.84	9,320.00	27.30	91.24	90.01	-371.10	1,551.71	2,440.50	2,349.61	90.89	26.851		
7,850.00	7,549.08	13,900.89	9,320.00	27.52	90.50	90.01	-420.83	1,551.70	2,436.76	2,346.18	90.58	26.901		
7,882.52	7,550.00	13,866.61	9,320.00	27.67	89.97	90.01	-453.34	1,551.70	2,436.04	2,345.73	90.31	26.973		
7,900.00	7,550.00	13,849.12	9,320.00	27.75	89.70	90.01	-470.82	1,551.70	2,436.02	2,345.84	90.17	27.015		
8,000.00	7,550.00	13,749.12	9,320.00	28.27	88.17	90.01	-570.82	1,551.68	2,435.88	2,346.46	89.41	27.243		
8,100.00	7,550.00	13,649.12	9,320.00	28.88	86.64	90.01	-670.82	1,551.66	2,435.74	2,347.02	88.72	27.453		
8,200.00	7,550.00	13,549.13	9,320.00	29.57	85.12	90.01	-770.82	1,551.65	2,435.60	2,347.51	88.10	27.647		
8,300.00	7,550.00	13,449.13	9,320.00	30.34	83.60	90.01	-870.82	1,551.63	2,435.47	2,347.94	87.53	27.824		
8,400.00	7,550.00	13,349.13	9,320.00	31.17	82.09	90.01	-970.82	1,551.62	2,435.33	2,348.31	87.02	27.986		
8,500.00	7,550.00	13,249.13	9,320.00	32.07	80.58	90.01	-1,070.82	1,551.60	2,435.19	2,348.63	86.56	28.132		
8,600.00	7,550.00	13,149.13	9,320.00	33.03	79.08	90.01	-1,170.81	1,551.58	2,435.06	2,348.90	86.15	28.264		
8,700.00	7,550.00	13,049.13	9,320.00	34.04	77.58	90.01	-1,270.81	1,551.57	2,434.92	2,349.13	85.79	28.382		
8,800.00	7,550.00	12,949.13	9,320.00	35.09	76.09	90.01	-1,370.81	1,551.55	2,434.78	2,349.31	85.47	28.486		
8,900.00	7,550.00	12,849.13	9,320.00	36.20	74.61	90.01	-1,470.81	1,551.53	2,434.64	2,349.45	85.19	28.579		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Energy Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Reference Site: Warren 25-23S-27E RB Fed COM
Site Error: 0.00 usft
Reference Well: #121H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM Conroe
Offset TVD Reference: Offset Datum

Offset Design Warren 25-23S-27E RB Fed COM - #206H - Wellbore #1 - Design #1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,000.00	7,550.00	12,749.13	9,320.00	37.34	73.13	90.01	-1,570.81	1,551.52	2,434.51	2,349.56	84.95	28.660	
9,100.00	7,550.00	12,649.13	9,320.00	38.53	71.67	90.01	-1,670.81	1,551.50	2,434.37	2,349.63	84.74	28.729	
9,200.00	7,550.00	12,549.13	9,320.00	39.74	70.21	90.01	-1,770.81	1,551.49	2,434.23	2,349.68	84.56	28.788	
9,300.00	7,550.00	12,449.13	9,320.00	40.99	68.76	90.01	-1,870.81	1,551.47	2,434.09	2,349.69	84.41	28.837	
9,400.00	7,550.00	12,349.13	9,320.00	42.26	67.32	90.01	-1,970.81	1,551.45	2,433.96	2,349.67	84.29	28.876	
9,500.00	7,550.00	12,249.13	9,320.00	43.56	65.89	90.01	-2,070.81	1,551.44	2,433.82	2,349.62	84.20	28.906	
9,600.00	7,550.00	12,149.13	9,320.00	44.89	64.47	90.01	-2,170.81	1,551.42	2,433.68	2,349.55	84.13	28.927	
9,700.00	7,550.00	12,049.13	9,320.00	46.23	63.06	90.01	-2,270.81	1,551.41	2,433.55	2,349.45	84.09	28.939	
9,800.00	7,550.00	11,949.13	9,320.00	47.60	61.67	90.01	-2,370.81	1,551.39	2,433.41	2,349.33	84.08	28.943	
9,900.00	7,550.00	11,849.13	9,320.00	48.98	60.28	90.01	-2,470.81	1,551.37	2,433.27	2,349.19	84.08	28.939	
10,000.00	7,550.00	11,749.13	9,320.00	50.38	58.92	90.01	-2,570.81	1,551.36	2,433.13	2,349.02	84.11	28.926	
10,100.00	7,550.00	11,649.13	9,320.00	51.80	57.56	90.01	-2,670.81	1,551.34	2,433.00	2,348.83	84.17	28.908	
10,200.00	7,550.00	11,549.13	9,320.00	53.23	56.23	90.01	-2,770.81	1,551.32	2,432.86	2,348.61	84.25	28.877	
10,300.00	7,550.00	11,449.13	9,320.00	54.67	54.91	90.01	-2,870.81	1,551.31	2,432.72	2,348.37	84.35	28.841	
10,400.00	7,550.00	11,349.13	9,320.00	56.12	53.61	90.01	-2,970.81	1,551.29	2,432.59	2,348.11	84.47	28.797	
10,500.00	7,550.00	11,249.13	9,320.00	57.59	52.33	90.01	-3,070.81	1,551.28	2,432.45	2,347.83	84.62	28.745	
10,600.00	7,550.00	11,149.13	9,320.00	59.06	51.07	90.01	-3,170.81	1,551.26	2,432.31	2,347.52	84.80	28.684	
10,700.00	7,550.00	11,049.13	9,320.00	60.54	49.83	90.01	-3,270.81	1,551.24	2,432.17	2,347.18	84.99	28.616	
10,800.00	7,550.00	10,949.13	9,320.00	62.04	48.62	90.01	-3,370.81	1,551.23	2,432.04	2,346.82	85.22	28.539	
10,900.00	7,550.00	7,572.86	7,538.00	63.54	27.88	136.54	-5,216.46	1,550.93	2,405.39	2,329.87	75.52	31.852	
11,000.00	7,550.00	7,572.86	7,538.00	65.05	27.88	134.85	-5,216.46	1,550.93	2,333.69	2,256.18	77.50	30.111	
11,100.00	7,550.00	7,572.86	7,538.00	66.56	27.88	133.06	-5,216.46	1,550.93	2,264.13	2,184.52	79.61	28.440	
11,200.00	7,550.00	7,572.86	7,538.00	68.08	27.88	131.16	-5,216.46	1,550.93	2,196.93	2,115.09	81.84	28.844	
11,300.00	7,550.00	7,572.86	7,538.00	69.61	27.88	129.14	-5,216.46	1,550.93	2,132.30	2,048.11	84.19	25.327	
11,400.00	7,550.00	7,572.86	7,538.00	71.15	27.88	127.00	-5,216.46	1,550.93	2,070.49	1,983.84	86.65	23.894	
11,500.00	7,550.00	7,572.86	7,538.00	72.69	27.88	124.72	-5,216.46	1,550.93	2,011.75	1,922.53	89.22	22.549	
11,600.00	7,550.00	7,572.86	7,538.00	74.23	27.88	122.32	-5,216.46	1,550.93	1,956.36	1,864.48	91.87	21.294	
11,700.00	7,550.00	7,572.86	7,538.00	75.78	27.88	119.78	-5,216.46	1,550.93	1,904.61	1,810.01	94.60	20.133	
11,800.00	7,550.00	7,572.86	7,538.00	77.33	27.88	117.10	-5,216.46	1,550.93	1,856.81	1,759.43	97.38	19.068	
11,900.00	7,550.00	7,572.86	7,538.00	78.89	27.88	114.29	-5,216.46	1,550.93	1,813.27	1,713.09	100.18	18.100	
12,000.00	7,550.00	7,572.86	7,538.00	80.45	27.88	111.35	-5,216.46	1,550.93	1,774.30	1,671.33	102.97	17.232	
12,100.00	7,550.00	7,572.86	7,538.00	82.02	27.88	108.28	-5,216.46	1,550.93	1,740.22	1,634.51	105.70	16.463	
12,200.00	7,550.00	7,572.86	7,538.00	83.59	27.88	105.10	-5,216.46	1,550.93	1,711.30	1,602.95	108.35	15.794	
12,300.00	7,550.00	7,572.86	7,538.00	85.16	27.88	101.83	-5,216.46	1,550.93	1,687.83	1,576.97	110.86	15.225	
12,381.32	7,550.00	7,572.86	7,538.00	86.44	27.88	99.10	-5,216.46	1,550.93	1,672.91	1,560.14	112.77	14.835 CC, ES, SF	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Energy Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Reference Site: Warren 25-23S-27E RB Fed COM
Site Error: 0.00 usft
Reference Well: #121H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM Conroe
Offset TVD Reference: Offset Datum

Offset Design Warren 25-23S-27E RB Fed COM - #221H - Wellbore #1 - Design #3													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Azimuth from North (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)							
0.00	0.00	0.00	0.00	0.00	0.00	-90.05	-0.05	-59.99	59.99					
100.00	100.00	100.00	100.00	0.13	0.13	-90.05	-0.05	-59.99	59.99	59.74	0.25	235.719		
200.00	200.00	200.00	200.00	0.49	0.49	-90.05	-0.05	-59.99	59.99	59.02	0.97	61.757		
300.00	300.00	300.00	300.00	0.84	0.84	-90.05	-0.05	-59.99	59.99	58.31	1.69	35.533		
400.00	400.00	400.00	400.00	1.20	1.20	-90.05	-0.05	-59.99	59.99	57.59	2.41	24.942		
500.00	500.00	500.00	500.00	1.56	1.56	-90.05	-0.05	-59.99	59.99	56.87	3.12	19.215		
600.00	600.00	600.00	600.00	1.92	1.92	-90.05	-0.05	-59.99	59.99	56.15	3.84	15.627		
700.00	700.00	700.00	700.00	2.28	2.28	-90.05	-0.05	-59.99	59.99	55.44	4.56	13.168		
800.00	800.00	800.00	800.00	2.64	2.64	-90.05	-0.05	-59.99	59.99	54.72	5.27	11.377 CC		
900.00	899.99	898.52	898.51	2.99	2.98	-90.60	0.33	-61.21	60.34	54.37	5.98	10.099 ES		
1,000.00	999.91	997.01	996.93	3.35	3.33	-92.22	1.47	-64.84	61.42	54.75	6.67	9.210		
1,066.88	1,066.66	1,062.86	1,062.65	3.59	3.56	-93.86	2.66	-68.62	62.58	55.45	7.13	8.774		
1,100.00	1,099.70	1,104.10	1,095.61	3.71	3.71	-94.74	3.34	-70.82	63.29	55.90	7.40	8.558		
1,200.00	1,199.46	1,204.17	1,195.30	4.07	4.07	-97.26	5.43	-77.47	65.52	57.42	8.11	8.082		
1,300.00	1,299.21	1,304.23	1,294.99	4.43	4.43	-99.62	7.51	-84.12	67.88	59.05	8.82	7.693		
1,400.00	1,398.97	1,404.30	1,394.69	4.80	4.79	-101.81	9.60	-90.78	70.34	60.79	9.54	7.370		
1,500.00	1,498.73	1,504.36	1,494.38	5.16	5.16	-103.86	11.68	-97.43	72.89	62.62	10.27	7.100		
1,600.00	1,598.48	1,604.43	1,594.07	5.53	5.52	-105.75	13.77	-104.08	75.53	64.54	10.99	6.871		
1,700.00	1,698.24	1,704.49	1,693.76	5.90	5.89	-107.53	15.85	-110.73	78.25	66.53	11.72	6.676		
1,800.00	1,797.99	1,804.56	1,793.45	6.27	6.26	-109.18	17.94	-117.38	81.04	68.59	12.45	6.509		
1,900.00	1,897.75	1,904.62	1,893.14	6.64	6.63	-110.72	20.02	-124.04	83.89	70.70	13.18	6.364		
2,000.00	1,997.51	2,004.69	1,992.83	7.00	7.00	-112.16	22.11	-130.69	86.79	72.88	13.92	6.237		
2,100.00	2,097.26	2,104.75	2,092.53	7.38	7.37	-113.50	24.19	-137.34	89.75	75.10	14.65	6.126		
2,200.00	2,197.02	2,204.82	2,192.22	7.75	7.74	-114.76	26.28	-143.99	92.76	77.37	15.39	6.028		
2,300.00	2,296.77	2,304.88	2,291.91	8.12	8.11	-115.94	28.36	-150.64	95.80	79.68	16.12	5.941		
2,400.00	2,396.53	2,404.95	2,391.60	8.49	8.48	-117.04	30.44	-157.30	98.89	82.02	16.86	5.864		
2,500.00	2,496.29	2,494.99	2,491.29	8.86	8.82	-118.08	32.53	-163.95	102.00	84.44	17.57	5.807		
2,600.00	2,596.04	2,593.13	2,589.11	9.23	9.19	-118.66	34.92	-171.56	105.96	87.67	18.29	5.794 SF		
2,700.00	2,695.80	2,691.02	2,686.43	9.60	9.56	-118.27	38.04	-181.54	111.70	92.69	19.01	5.877		
2,800.00	2,795.55	2,789.10	2,783.66	9.97	9.95	-117.08	41.90	-193.85	119.21	99.49	19.72	6.045		
2,900.00	2,895.31	2,888.72	2,882.31	10.35	10.35	-115.72	46.05	-207.09	127.34	106.89	20.46	6.225		
3,000.00	2,995.07	2,988.35	2,980.97	10.72	10.74	-114.53	50.20	-220.33	135.54	114.34	21.19	6.395		
3,100.00	3,094.82	3,087.98	3,079.62	11.09	11.14	-113.48	54.35	-233.56	143.78	121.85	21.93	6.556		
3,133.60	3,128.34	3,121.45	3,112.77	11.21	11.28	-113.15	55.74	-238.01	146.56	124.38	22.18	6.608		
3,200.00	3,194.62	3,187.57	3,178.25	11.46	11.54	-112.33	58.49	-246.79	152.27	129.61	22.67	6.718		
3,300.00	3,294.54	3,286.99	3,276.70	11.82	11.95	-110.50	62.63	-260.00	161.74	138.35	23.38	6.916		
3,400.00	3,394.52	3,386.17	3,374.91	12.18	12.35	-108.07	66.76	-273.17	172.42	148.34	24.09	7.159		
3,400.48	3,395.00	3,386.64	3,375.38	12.18	12.35	-108.05	66.78	-273.24	172.48	148.39	24.09	7.160		
3,500.00	3,494.52	3,485.19	3,472.97	12.52	12.75	-105.56	70.89	-286.33	183.97	159.19	24.78	7.425		
3,600.00	3,594.52	3,584.22	3,571.03	12.87	13.15	-103.35	75.01	-299.48	195.83	170.36	25.47	7.687		
3,700.00	3,694.52	3,683.24	3,669.09	13.22	13.56	-101.39	79.13	-312.64	207.95	181.78	26.17	7.945		
3,800.00	3,794.52	3,782.27	3,767.16	13.57	13.96	-99.65	83.26	-325.80	220.28	193.40	26.87	8.197		
3,900.00	3,894.52	3,881.30	3,865.22	13.92	14.37	-98.09	87.38	-338.95	232.79	205.21	27.57	8.442		
4,000.00	3,994.52	3,980.32	3,963.28	14.27	14.78	-96.70	91.50	-352.11	245.45	217.17	28.28	8.680		
4,100.00	4,094.52	4,079.35	4,061.34	14.62	15.18	-95.44	95.62	-365.26	258.24	229.26	28.98	8.910		
4,200.00	4,194.52	4,178.37	4,159.40	14.98	15.59	-94.30	99.75	-378.42	271.14	241.45	29.69	9.133		
4,300.00	4,294.52	4,277.40	4,257.47	15.33	16.00	-93.26	103.87	-391.57	284.14	253.74	30.40	9.348		
4,400.00	4,394.52	4,376.43	4,355.53	15.68	16.41	-92.31	107.99	-404.73	297.22	266.12	31.10	9.555		
4,500.00	4,494.52	4,483.63	4,461.87	16.03	16.84	-91.47	112.02	-417.56	309.08	277.19	31.89	9.692		
4,600.00	4,594.52	4,591.56	4,569.29	16.38	17.26	-90.85	115.17	-427.61	318.33	285.66	32.66	9.746		
4,700.00	4,694.52	4,700.01	4,677.47	16.74	17.67	-90.44	117.41	-434.78	324.92	291.50	33.41	9.724		
4,800.00	4,794.52	4,808.79	4,786.17	17.09	18.05	-90.20	118.74	-439.02	328.81	294.67	34.14	9.630		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Energy Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Reference Site: Warren 25-23S-27E RB Fed COM
Site Error: 0.00 usft
Reference Well: #121H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM Conroe
Offset TVD Reference: Offset Datum

Offset Design Warren 25-23S-27E RB Fed COM - #221H - Wellbore #1 - Design #3													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Azimuth from North (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
4,900.00	4,894.52	4,917.16	4,894.52	17.44	18.42	-90.13	119.15	-440.32	330.00	295.15	34.85	9.469		
5,000.00	4,994.52	5,017.16	4,994.52	17.80	18.75	-90.13	119.15	-440.32	330.00	294.45	35.55	9.284		
5,100.00	5,094.52	5,117.16	5,094.52	18.15	19.08	-90.13	119.15	-440.32	330.00	293.76	36.24	9.105		
5,200.00	5,194.52	5,217.16	5,194.52	18.51	19.41	-90.13	119.15	-440.32	330.00	293.06	36.94	8.933		
5,300.00	5,294.52	5,317.16	5,294.52	18.86	19.75	-90.13	119.15	-440.32	330.00	292.36	37.64	8.767		
5,400.00	5,394.52	5,417.16	5,394.52	19.21	20.08	-90.13	119.15	-440.32	330.00	291.66	38.34	8.607		
5,500.00	5,494.52	5,517.16	5,494.52	19.57	20.41	-90.13	119.15	-440.32	330.00	290.96	39.04	8.452		
5,600.00	5,594.52	5,617.16	5,594.52	19.92	20.75	-90.13	119.15	-440.32	330.00	290.26	39.74	8.303		
5,700.00	5,694.52	5,717.16	5,694.52	20.28	21.09	-90.13	119.15	-440.32	330.00	289.55	40.45	8.159		
5,800.00	5,794.52	5,817.16	5,794.52	20.63	21.42	-90.13	119.15	-440.32	330.00	288.85	41.15	8.020		
5,900.00	5,894.52	5,917.16	5,894.52	20.99	21.76	-90.13	119.15	-440.32	330.00	288.15	41.85	7.885		
6,000.00	5,994.52	6,017.16	5,994.52	21.34	22.10	-90.13	119.15	-440.32	330.00	287.45	42.55	7.755		
6,100.00	6,094.52	6,117.16	6,094.52	21.70	22.44	-90.13	119.15	-440.32	330.00	286.74	43.26	7.629		
6,200.00	6,194.52	6,217.16	6,194.52	22.05	22.77	-90.13	119.15	-440.32	330.00	286.04	43.96	7.506		
6,300.00	6,294.52	6,317.16	6,294.52	22.41	23.11	-90.13	119.15	-440.32	330.00	285.33	44.67	7.388		
6,400.00	6,394.52	6,417.16	6,394.52	22.76	23.45	-90.13	119.15	-440.32	330.00	284.63	45.37	7.273		
6,500.00	6,494.52	6,517.16	6,494.52	23.12	23.80	-90.13	119.15	-440.32	330.00	283.92	46.08	7.162		
6,600.00	6,594.52	6,617.16	6,594.52	23.48	24.14	-90.13	119.15	-440.32	330.00	283.22	46.78	7.054		
6,700.00	6,694.52	6,717.16	6,694.52	23.83	24.48	-90.13	119.15	-440.32	330.00	282.51	47.49	6.949		
6,800.00	6,794.52	6,817.16	6,794.52	24.19	24.82	-90.13	119.15	-440.32	330.00	281.80	48.20	6.847		
6,900.00	6,894.52	6,917.16	6,894.52	24.54	25.16	-90.13	119.15	-440.32	330.00	281.10	48.90	6.748		
6,982.52	6,977.04	7,000.32	6,977.04	24.84	25.45	-90.13	119.15	-440.32	330.00	280.51	49.49	6.668		
6,994.68	6,989.20	7,011.84	6,989.20	24.88	25.49	-90.11	119.15	-440.32	330.00	280.43	49.57	6.657		
7,000.00	6,994.52	7,017.16	6,994.52	24.90	25.51	-90.08	119.15	-440.32	330.00	280.39	49.61	6.652		
7,050.00	7,044.37	7,067.01	7,044.37	25.05	25.68	-89.44	119.15	-440.32	330.02	280.09	49.93	6.609		
7,100.00	7,093.70	7,116.34	7,093.70	25.21	25.85	-88.05	119.15	-440.32	330.21	279.97	50.25	6.572		
7,150.00	7,142.15	7,164.79	7,142.15	25.35	26.01	-85.92	119.15	-440.32	330.88	280.34	50.55	6.546		
7,200.00	7,189.34	7,211.98	7,189.34	25.49	26.18	-83.08	119.15	-440.32	332.49	281.66	50.84	6.540		
7,250.00	7,234.91	7,257.55	7,234.91	25.63	26.33	-79.60	119.15	-440.32	335.62	284.50	51.12	6.565		
7,300.00	7,278.52	7,301.16	7,278.52	25.75	26.48	-75.56	119.15	-440.32	340.92	289.51	51.41	6.632		
7,350.00	7,319.84	7,342.48	7,319.84	25.86	26.63	-71.09	119.15	-440.32	349.05	297.35	51.69	6.752		
7,400.00	7,358.55	7,381.19	7,358.55	25.97	26.76	-66.33	119.15	-440.32	360.59	308.61	51.98	6.937		
7,450.00	7,394.36	7,416.99	7,394.36	26.08	26.88	-61.46	119.15	-440.32	376.01	323.74	52.27	7.193		
7,500.00	7,426.98	7,449.62	7,426.98	26.22	27.00	-56.65	119.15	-440.32	395.56	343.00	52.56	7.526		
7,550.00	7,456.19	7,478.83	7,456.19	26.37	27.10	-52.02	119.15	-440.32	419.29	366.46	52.83	7.937		
7,600.00	7,481.75	7,504.39	7,481.75	26.54	27.18	-47.68	119.15	-440.32	447.07	393.99	53.08	8.422		
7,650.00	7,503.46	7,526.10	7,503.46	26.71	27.26	-43.70	119.15	-440.32	478.60	425.30	53.31	8.978		
7,700.00	7,521.17	7,543.81	7,521.17	26.89	27.32	-40.10	119.15	-440.32	513.47	459.97	53.50	9.598		
7,750.00	7,534.74	7,557.38	7,534.74	27.09	27.37	-36.88	119.15	-440.32	551.19	497.53	53.66	10.272		
7,800.00	7,544.07	7,566.71	7,544.07	27.30	27.40	-34.03	119.15	-440.32	591.26	537.47	53.79	10.993		
7,850.00	7,549.08	7,571.72	7,549.08	27.52	27.42	-31.52	119.15	-440.32	633.13	579.25	53.88	11.751		
7,882.52	7,550.00	7,572.64	7,550.00	27.67	27.42	-30.05	119.15	-440.32	661.08	607.16	53.93	12.259		
7,900.00	7,550.00	7,572.64	7,550.00	27.75	27.42	-29.31	119.15	-440.32	676.29	622.34	53.95	12.536		
8,000.00	7,550.00	7,572.64	7,550.00	28.27	27.42	-25.66	119.15	-440.32	765.13	711.08	54.05	14.156		
8,100.00	7,550.00	7,572.64	7,550.00	28.88	27.42	-22.77	119.15	-440.32	856.44	802.30	54.14	15.820		
8,200.00	7,550.00	7,572.64	7,550.00	29.57	27.42	-20.44	119.15	-440.32	949.50	895.30	54.20	17.517		
8,300.00	7,550.00	7,572.64	7,550.00	30.34	27.42	-18.54	119.15	-440.32	1,043.85	989.58	54.26	19.237		
8,400.00	7,550.00	7,572.64	7,550.00	31.17	27.42	-16.95	119.15	-440.32	1,139.16	1,084.84	54.31	20.974		
8,500.00	7,550.00	7,572.64	7,550.00	32.07	27.42	-15.60	119.15	-440.32	1,235.21	1,180.85	54.36	22.724		
8,600.00	7,550.00	7,572.64	7,550.00	33.03	27.42	-14.45	119.15	-440.32	1,331.84	1,277.44	54.40	24.483		
8,700.00	7,550.00	7,572.64	7,550.00	34.04	27.42	-13.46	119.15	-440.32	1,428.94	1,374.50	54.43	26.251		
8,800.00	7,550.00	7,572.64	7,550.00	35.09	27.42	-12.59	119.15	-440.32	1,526.41	1,471.94	54.47	28.024		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Energy Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Reference Site: Warren 25-23S-27E RB Fed COM
Site Error: 0.00 usft
Reference Well: #121H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM Conroe
Offset TVD Reference: Offset Datum

Offset Design Warren 25-23S-27E RB Fed COM - #221H - Wellbore #1 - Design #3													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Azimuth from North (°)	Distance		Minimum Separation (usft)	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
8,900.00	7,550.00	7,572.64	7,550.00	36.20	27.42	-11.83	119.15	-440.32	1,624.19	1,569.69	54.50	29.801		
9,000.00	7,550.00	7,572.64	7,550.00	37.34	27.42	-11.15	119.15	-440.32	1,722.22	1,667.69	54.53	31.582		
9,100.00	7,550.00	7,572.64	7,550.00	38.53	27.42	-10.55	119.15	-440.32	1,820.47	1,765.91	54.56	33.365		
9,200.00	7,550.00	7,572.64	7,550.00	39.74	27.42	-10.01	119.15	-440.32	1,918.90	1,864.31	54.59	35.150		
9,300.00	7,550.00	7,572.64	7,550.00	40.99	27.42	-9.52	119.15	-440.32	2,017.48	1,962.86	54.62	36.935		
9,400.00	7,550.00	7,572.64	7,550.00	42.26	27.42	-9.08	119.15	-440.32	2,116.20	2,061.55	54.65	38.722		
9,500.00	7,550.00	7,572.64	7,550.00	43.56	27.42	-8.67	119.15	-440.32	2,215.03	2,160.35	54.68	40.509		
9,600.00	7,550.00	7,572.64	7,550.00	44.89	27.42	-8.31	119.15	-440.32	2,313.96	2,259.25	54.71	42.296		
9,700.00	7,550.00	7,572.64	7,550.00	46.23	27.42	-7.97	119.15	-440.32	2,412.98	2,358.24	54.74	44.082		
9,800.00	7,550.00	7,572.64	7,550.00	47.60	27.42	-7.65	119.15	-440.32	2,512.08	2,457.31	54.77	45.867		
9,900.00	7,550.00	7,572.64	7,550.00	48.98	27.42	-7.37	119.15	-440.32	2,611.25	2,556.45	54.80	47.652		
10,000.00	7,550.00	7,572.64	7,550.00	50.38	27.42	-7.10	119.15	-440.32	2,710.47	2,655.64	54.83	49.435		
10,100.00	7,550.00	12,861.57	10,300.00	51.80	57.48	-90.11	-2,671.16	-435.15	2,769.73	2,715.76	53.97	51.321		
10,200.00	7,550.00	12,961.57	10,300.00	53.23	58.77	-90.11	-2,771.16	-434.97	2,769.73	2,714.47	55.26	50.118		
10,300.00	7,550.00	13,061.57	10,300.00	54.67	60.07	-90.11	-2,871.16	-434.78	2,769.73	2,713.16	56.57	48.957		
10,400.00	7,550.00	13,161.57	10,300.00	56.12	61.39	-90.11	-2,971.16	-434.60	2,769.73	2,711.83	57.90	47.837		
10,500.00	7,550.00	13,261.57	10,300.00	57.59	62.73	-90.11	-3,071.16	-434.41	2,769.73	2,710.49	59.24	46.756		
10,600.00	7,550.00	13,361.57	10,300.00	59.06	64.09	-90.11	-3,171.16	-434.23	2,769.73	2,709.14	60.59	45.713		
10,700.00	7,550.00	13,461.57	10,300.00	60.54	65.45	-90.11	-3,271.16	-434.04	2,769.73	2,707.78	61.95	44.706		
10,800.00	7,550.00	13,561.57	10,300.00	62.04	66.84	-90.11	-3,371.16	-433.85	2,769.73	2,706.40	63.33	43.736		
10,900.00	7,550.00	13,661.57	10,300.00	63.54	68.23	-90.11	-3,471.16	-433.67	2,769.73	2,705.02	64.71	42.800		
11,000.00	7,550.00	13,761.57	10,300.00	65.05	69.63	-90.11	-3,571.15	-433.48	2,769.73	2,703.62	66.11	41.897		
11,100.00	7,550.00	13,861.57	10,300.00	66.56	71.05	-90.11	-3,671.15	-433.30	2,769.73	2,702.22	67.51	41.025		
11,200.00	7,550.00	13,961.57	10,300.00	68.08	72.47	-90.11	-3,771.15	-433.11	2,769.73	2,700.80	68.93	40.184		
11,300.00	7,550.00	14,061.57	10,300.00	69.61	73.91	-90.11	-3,871.15	-432.93	2,769.73	2,699.38	70.35	39.373		
11,400.00	7,550.00	14,161.57	10,300.00	71.15	75.35	-90.11	-3,971.15	-432.74	2,769.73	2,697.95	71.78	38.589		
11,500.00	7,550.00	14,261.57	10,300.00	72.69	76.81	-90.11	-4,071.15	-432.56	2,769.73	2,696.52	73.21	37.832		
11,600.00	7,550.00	14,361.57	10,300.00	74.23	78.27	-90.11	-4,171.15	-432.37	2,769.73	2,695.08	74.65	37.101		
11,700.00	7,550.00	14,461.57	10,300.00	75.78	79.74	-90.11	-4,271.15	-432.19	2,769.73	2,693.63	76.10	36.394		
11,800.00	7,550.00	14,561.57	10,300.00	77.33	81.21	-90.11	-4,371.15	-432.00	2,769.73	2,692.17	77.56	35.711		
11,900.00	7,550.00	14,661.57	10,300.00	78.89	82.69	-90.11	-4,471.15	-431.82	2,769.73	2,690.71	79.02	35.051		
12,000.00	7,550.00	14,761.57	10,300.00	80.45	84.18	-90.11	-4,571.15	-431.63	2,769.73	2,689.24	80.49	34.412		
12,100.00	7,550.00	14,861.57	10,300.00	82.02	85.68	-90.11	-4,671.15	-431.45	2,769.73	2,687.77	81.96	33.794		
12,200.00	7,550.00	14,961.57	10,300.00	83.59	87.18	-90.11	-4,771.15	-431.26	2,769.73	2,686.29	83.44	33.196		
12,300.00	7,550.00	15,061.57	10,300.00	85.16	88.69	-90.11	-4,871.15	-431.08	2,769.73	2,684.81	84.92	32.617		
12,381.32	7,550.00	15,142.89	10,300.00	86.44	89.92	-90.11	-4,952.47	-430.93	2,769.73	2,683.60	86.13	32.159		



MS Energy Services
Anticollision Report



Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Reference Site: Warren 25-23S-27E RB Fed COM
Site Error: 0.00 usft
Reference Well: #121H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM Conroe
Offset TVD Reference: Offset Datum

Offset Design Warren 25-23S-27E RB Fed COM - #225H - Wellbore #1 - Design #3														Offset Site Error: 0.00 usft
Survey Program: 0-MWD														Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	89.81	0.20	59.99	59.99					
100.00	100.00	100.00	100.00	0.13	0.13	89.81	0.20	59.99	59.99	59.73	0.25	235.700		
200.00	200.00	200.00	200.00	0.49	0.49	89.81	0.20	59.99	59.99	59.02	0.97	61.752		
300.00	300.00	300.00	300.00	0.84	0.84	89.81	0.20	59.99	59.99	58.30	1.69	35.530		
400.00	400.00	400.00	400.00	1.20	1.20	89.81	0.20	59.99	59.99	57.58	2.41	24.940		
500.00	500.00	500.00	500.00	1.56	1.56	89.81	0.20	59.99	59.99	56.87	3.12	19.213		
600.00	600.00	600.00	600.00	1.92	1.92	89.81	0.20	59.99	59.99	56.15	3.84	15.625		
700.00	700.00	700.00	700.00	2.28	2.28	89.81	0.20	59.99	59.99	55.43	4.56	13.167		
800.00	800.00	800.00	800.00	2.64	2.64	89.81	0.20	59.99	59.99	54.72	5.27	11.376 CC, ES		
900.00	899.99	898.72	898.71	2.99	2.99	90.00	0.96	61.01	61.91	55.93	5.98	10.354		
1,000.00	999.91	997.23	997.14	3.35	3.34	90.50	3.26	64.05	67.66	60.98	6.68	10.129		
1,066.88	1,066.66	1,062.88	1,062.67	3.59	3.57	90.95	5.64	67.21	73.64	66.49	7.15	10.301		
1,100.00	1,099.70	1,104.24	1,095.47	3.71	3.72	91.15	7.02	69.04	77.05	69.63	7.41	10.393		
1,200.00	1,199.46	1,204.78	1,194.69	4.07	4.08	91.64	11.20	74.58	87.35	79.23	8.13	10.749		
1,300.00	1,299.21	1,305.31	1,293.91	4.43	4.44	92.03	15.38	80.13	97.66	88.82	8.84	11.043		
1,400.00	1,398.97	1,405.85	1,393.14	4.80	4.81	92.34	19.56	85.67	107.98	98.41	9.56	11.292		
1,500.00	1,498.73	1,506.38	1,492.36	5.16	5.18	92.60	23.75	91.22	118.29	108.01	10.28	11.503		
1,600.00	1,598.48	1,606.92	1,591.58	5.53	5.55	92.82	27.93	96.76	128.61	117.61	11.01	11.685		
1,700.00	1,698.24	1,707.45	1,690.80	5.90	5.91	93.01	32.11	102.30	138.93	127.20	11.73	11.844		
1,800.00	1,797.99	1,807.99	1,790.03	6.27	6.28	93.17	36.29	107.85	149.25	136.80	12.46	11.983		
1,900.00	1,897.75	1,908.52	1,889.25	6.64	6.66	93.31	40.47	113.39	159.58	146.40	13.18	12.106		
2,000.00	1,997.51	2,009.06	1,988.47	7.00	7.03	93.43	44.65	118.94	169.90	155.99	13.91	12.216		
2,100.00	2,097.26	2,109.59	2,087.69	7.38	7.40	93.54	48.83	124.48	180.22	165.59	14.64	12.314		
2,200.00	2,197.02	2,189.87	2,186.92	7.75	7.70	93.63	53.01	130.02	190.55	175.26	15.29	12.463		
2,300.00	2,296.77	2,289.34	2,286.14	8.12	8.06	93.72	57.19	135.57	200.87	184.86	16.01	12.544		
2,400.00	2,396.53	2,388.80	2,385.36	8.49	8.43	93.80	61.38	141.11	211.20	194.46	16.74	12.617		
2,500.00	2,496.29	2,488.27	2,484.58	8.86	8.80	93.87	65.56	146.66	221.53	204.06	17.46	12.685		
2,600.00	2,596.04	2,587.73	2,583.81	9.23	9.17	93.93	69.74	152.20	231.85	213.66	18.19	12.746		
2,700.00	2,695.80	2,687.20	2,683.03	9.60	9.54	93.99	73.92	157.75	242.18	223.26	18.92	12.803		
2,800.00	2,795.55	2,786.66	2,782.25	9.97	9.91	94.05	78.10	163.29	252.51	232.86	19.64	12.856		
2,900.00	2,895.31	2,886.13	2,881.47	10.35	10.28	94.10	82.28	168.83	262.83	242.47	20.37	12.904		
3,000.00	2,995.07	2,985.59	2,980.69	10.72	10.65	94.14	86.46	174.38	273.16	252.07	21.09	12.949		
3,100.00	3,094.82	3,085.06	3,079.92	11.09	11.02	94.19	90.64	179.92	283.49	261.67	21.82	12.992		
3,133.60	3,128.34	3,118.48	3,113.25	11.21	11.14	94.20	92.05	181.78	286.96	264.89	22.07	13.005		
3,200.00	3,194.62	3,184.56	3,179.18	11.46	11.39	94.15	94.83	185.47	293.40	270.85	22.55	13.013		
3,300.00	3,294.54	3,284.21	3,278.59	11.82	11.76	93.79	99.02	191.02	301.53	278.26	23.27	12.958		
3,400.00	3,394.52	3,383.95	3,378.08	12.18	12.13	93.11	103.21	196.58	307.79	283.81	23.99	12.832		
3,400.48	3,395.00	3,384.42	3,378.55	12.18	12.13	93.11	103.23	196.61	307.82	283.83	23.99	12.831		
3,500.00	3,494.52	3,483.70	3,477.59	12.52	12.50	92.29	107.40	202.14	313.17	288.47	24.70	12.679		
3,600.00	3,594.52	3,583.46	3,577.10	12.87	12.87	91.49	111.60	207.70	318.60	293.19	25.41	12.537		
3,700.00	3,694.52	3,684.54	3,677.94	13.22	13.25	90.72	115.81	213.30	324.06	297.93	26.14	12.399		
3,800.00	3,794.52	3,791.68	3,784.93	13.57	13.64	90.14	119.08	217.63	328.09	301.20	26.89	12.200		
3,900.00	3,894.52	3,899.04	3,892.26	13.92	14.02	89.89	120.55	219.57	329.90	302.26	27.63	11.938		
4,000.00	3,994.52	4,001.30	3,994.52	14.27	14.38	89.87	120.63	219.68	330.00	301.66	28.34	11.643		
4,100.00	4,094.52	4,101.30	4,094.52	14.62	14.72	89.87	120.63	219.68	330.00	300.95	29.05	11.361		
4,200.00	4,194.52	4,201.30	4,194.52	14.98	15.07	89.87	120.63	219.68	330.00	300.25	29.75	11.093		
4,300.00	4,294.52	4,301.30	4,294.52	15.33	15.42	89.87	120.63	219.68	330.00	299.55	30.45	10.836		
4,400.00	4,394.52	4,401.30	4,394.52	15.68	15.77	89.87	120.63	219.68	330.00	298.84	31.16	10.591		
4,500.00	4,494.52	4,501.30	4,494.52	16.03	16.11	89.87	120.63	219.68	330.00	298.14	31.86	10.357		
4,600.00	4,594.52	4,601.30	4,594.52	16.38	16.46	89.87	120.63	219.68	330.00	297.43	32.57	10.133		
4,700.00	4,694.52	4,701.30	4,694.52	16.74	16.81	89.87	120.63	219.68	330.00	296.73	33.27	9.918		
4,800.00	4,794.52	4,801.30	4,794.52	17.09	17.16	89.87	120.63	219.68	330.00	296.02	33.98	9.712		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Energy Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Reference Site: Warren 25-23S-27E RB Fed COM
Site Error: 0.00 usft
Reference Well: #121H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM Conroe
Offset TVD Reference: Offset Datum

Offset Design Warren 25-23S-27E RB Fed COM - #225H - Wellbore #1 - Design #3													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference	Offset		Semi Major Axis		Distance		Minimum Separation		Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,900.00	4,894.52	4,901.30	4,894.52	17.44	17.51	89.87	120.63	219.68	330.00	295.31	34.69	9.514		
5,000.00	4,994.52	5,001.30	4,994.52	17.80	17.86	89.87	120.63	219.68	330.00	294.61	35.39	9.324		
5,100.00	5,094.52	5,101.30	5,094.52	18.15	18.21	89.87	120.63	219.68	330.00	293.90	36.10	9.141		
5,200.00	5,194.52	5,201.30	5,194.52	18.51	18.56	89.87	120.63	219.68	330.00	293.19	36.81	8.965		
5,300.00	5,294.52	5,301.30	5,294.52	18.86	18.91	89.87	120.63	219.68	330.00	292.48	37.52	8.796		
5,400.00	5,394.52	5,401.30	5,394.52	19.21	19.27	89.87	120.63	219.68	330.00	291.77	38.23	8.633		
5,500.00	5,494.52	5,501.30	5,494.52	19.57	19.62	89.87	120.63	219.68	330.00	291.06	38.94	8.476		
5,600.00	5,594.52	5,601.30	5,594.52	19.92	19.97	89.87	120.63	219.68	330.00	290.36	39.64	8.324		
5,700.00	5,694.52	5,701.30	5,694.52	20.28	20.32	89.87	120.63	219.68	330.00	289.65	40.35	8.178		
5,800.00	5,794.52	5,801.30	5,794.52	20.63	20.67	89.87	120.63	219.68	330.00	288.94	41.06	8.036		
5,900.00	5,894.52	5,901.30	5,894.52	20.99	21.03	89.87	120.63	219.68	330.00	288.23	41.77	7.900		
6,000.00	5,994.52	6,001.30	5,994.52	21.34	21.38	89.87	120.63	219.68	330.00	287.52	42.48	7.768		
6,100.00	6,094.52	6,101.30	6,094.52	21.70	21.73	89.87	120.63	219.68	330.00	286.81	43.19	7.640		
6,200.00	6,194.52	6,201.30	6,194.52	22.05	22.09	89.87	120.63	219.68	330.00	286.10	43.90	7.516		
6,300.00	6,294.52	6,301.30	6,294.52	22.41	22.44	89.87	120.63	219.68	330.00	285.38	44.62	7.397		
6,400.00	6,394.52	6,401.30	6,394.52	22.76	22.79	89.87	120.63	219.68	330.00	284.67	45.33	7.280		
6,500.00	6,494.52	6,501.30	6,494.52	23.12	23.15	89.87	120.63	219.68	330.00	283.96	46.04	7.168		
6,600.00	6,594.52	6,601.30	6,594.52	23.48	23.50	89.87	120.63	219.68	330.00	283.25	46.75	7.059		
6,700.00	6,694.52	6,701.30	6,694.52	23.83	23.85	89.87	120.63	219.68	330.00	282.54	47.46	6.953		
6,800.00	6,794.52	6,801.30	6,794.52	24.19	24.21	89.87	120.63	219.68	330.00	281.83	48.17	6.850		
6,900.00	6,894.52	6,901.30	6,894.52	24.54	24.56	89.87	120.63	219.68	330.00	281.12	48.88	6.751		
6,982.52	6,977.04	6,983.82	6,977.04	24.84	24.85	89.87	120.63	219.68	330.00	280.53	49.47	6.670		
6,982.52	6,977.04	6,983.82	6,977.04	24.84	24.85	89.87	120.63	219.68	330.00	280.53	49.47	6.670		
7,000.00	6,994.52	7,001.29	6,994.52	24.90	24.92	89.83	120.63	219.68	330.00	280.41	49.59	6.654		
7,050.00	7,044.37	7,051.14	7,044.37	25.05	25.09	89.18	120.63	219.68	330.03	280.10	49.93	6.610		
7,100.00	7,093.70	7,100.48	7,093.70	25.21	25.27	87.79	120.63	219.68	330.22	279.97	50.25	6.571		
7,150.00	7,142.15	7,148.92	7,142.15	25.35	25.44	85.66	120.63	219.68	330.90	280.33	50.57	6.544		
7,200.00	7,189.34	7,203.89	7,189.34	25.49	25.64	82.83	120.63	219.68	332.53	281.62	50.90	6.533 SF		
7,250.00	7,234.91	7,241.69	7,234.91	25.63	25.77	79.35	120.63	219.68	335.67	284.50	51.17	6.500		
7,300.00	7,278.52	7,285.30	7,278.52	25.75	25.92	75.31	120.63	219.68	340.99	289.53	51.45	6.627		
7,350.00	7,319.84	7,326.62	7,319.84	25.86	26.07	70.84	120.63	219.68	349.13	297.41	51.73	6.749		
7,400.00	7,358.55	7,365.32	7,358.55	25.97	26.21	66.08	120.63	219.68	360.70	308.71	51.99	6.938		
7,450.00	7,394.36	7,401.13	7,394.36	26.08	26.33	61.22	120.63	219.68	376.13	323.90	52.23	7.201		
7,500.00	7,426.98	7,433.76	7,426.98	26.22	26.45	56.40	120.63	219.68	395.70	343.24	52.46	7.542		
7,550.00	7,456.19	7,462.96	7,456.19	26.37	26.55	51.78	120.63	219.68	419.45	366.78	52.67	7.964		
7,600.00	7,481.75	7,488.52	7,481.75	26.54	26.64	47.44	120.63	219.68	447.25	394.40	52.85	8.462		
7,650.00	7,503.46	7,510.24	7,503.46	26.71	26.72	43.46	120.63	219.68	478.79	425.78	53.01	9.033		
7,700.00	7,521.17	7,527.95	7,521.17	26.89	26.78	39.87	120.63	219.68	513.67	460.53	53.13	9.668		
7,750.00	7,534.74	7,541.52	7,534.74	27.09	26.83	36.65	120.63	219.68	551.40	498.17	53.23	10.359		
7,800.00	7,544.07	7,550.84	7,544.07	27.30	26.87	33.81	120.63	219.68	591.47	538.18	53.29	11.098		
7,850.00	7,549.08	7,555.85	7,549.08	27.52	26.88	31.30	120.63	219.68	633.35	580.01	53.34	11.875		
7,882.52	7,550.00	7,556.77	7,550.00	27.67	26.89	29.83	120.63	219.68	661.31	607.96	53.35	12.396		
7,900.00	7,550.00	7,556.77	7,550.00	27.75	26.89	29.09	120.63	219.68	676.51	623.16	53.35	12.680		
8,000.00	7,550.00	7,556.77	7,550.00	28.27	26.89	25.44	120.63	219.68	765.37	711.99	53.38	14.338		
8,100.00	7,550.00	7,556.77	7,550.00	28.88	26.89	22.55	120.63	219.68	856.68	803.28	53.40	16.042		
8,200.00	7,550.00	7,556.77	7,550.00	29.57	26.89	20.23	120.63	219.68	949.74	896.32	53.42	17.778		
8,300.00	7,550.00	7,556.77	7,550.00	30.34	26.89	18.32	120.63	219.68	1,044.09	990.65	53.44	19.536		
8,400.00	7,550.00	7,556.77	7,550.00	31.17	26.89	16.73	120.63	219.68	1,139.40	1,085.94	53.46	21.312		
8,500.00	7,550.00	7,556.77	7,550.00	32.07	26.89	15.39	120.63	219.68	1,235.46	1,181.97	53.48	23.100		
8,600.00	7,550.00	7,556.77	7,550.00	33.03	26.89	14.24	120.63	219.68	1,332.09	1,278.59	53.50	24.898		
8,700.00	7,550.00	7,556.77	7,550.00	34.04	26.89	13.24	120.63	219.68	1,429.19	1,375.67	53.52	26.703		
8,800.00	7,550.00	7,556.77	7,550.00	35.09	26.89	12.38	120.63	219.68	1,526.66	1,473.12	53.54	28.514		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Energy Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Reference Site: Warren 25-23S-27E RB Fed COM
Site Error: 0.00 usft
Reference Well: #121H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM Conroe
Offset TVD Reference: Offset Datum

Offset Design Warren 25-23S-27E RB Fed COM - #225H - Wellbore #1 - Design #3													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
8,900.00	7,550.00	7,556.77	7,550.00	36.20	26.89	11.61	120.63	219.68	1,624.44	1,570.88	53.56	30.329		
9,000.00	7,550.00	7,556.77	7,550.00	37.34	26.89	10.94	120.63	219.68	1,722.48	1,668.89	53.58	32.147		
9,100.00	7,550.00	7,556.77	7,550.00	38.53	26.89	10.34	120.63	219.68	1,820.72	1,767.12	53.60	33.968		
9,200.00	7,550.00	7,556.77	7,550.00	39.74	26.89	9.80	120.63	219.68	1,919.15	1,865.53	53.62	35.790		
9,300.00	7,550.00	7,556.77	7,550.00	40.99	26.89	9.31	120.63	219.68	2,017.74	1,964.09	53.64	37.613		
9,400.00	7,550.00	7,556.77	7,550.00	42.26	26.89	8.86	120.63	219.68	2,116.45	2,062.79	53.67	39.437		
9,500.00	7,550.00	7,556.77	7,550.00	43.56	26.89	8.46	120.63	219.68	2,215.29	2,161.59	53.69	41.260		
9,600.00	7,550.00	7,556.77	7,550.00	44.89	26.89	8.09	120.63	219.68	2,314.22	2,260.50	53.71	43.084		
9,700.00	7,550.00	7,556.77	7,550.00	46.23	26.89	7.75	120.63	219.68	2,413.24	2,359.50	53.74	44.906		
9,800.00	7,550.00	7,556.77	7,550.00	47.60	26.89	7.44	120.63	219.68	2,512.34	2,458.57	53.77	46.728		
9,900.00	7,550.00	7,556.77	7,550.00	48.98	26.89	7.15	120.63	219.68	2,611.50	2,557.71	53.79	48.549		
10,000.00	7,550.00	7,556.77	7,550.00	50.38	26.89	6.89	120.63	219.68	2,710.73	2,656.91	53.82	50.368		
10,100.00	7,550.00	12,845.96	10,300.00	51.80	57.32	89.89	-2,669.93	224.86	2,769.73	2,715.50	54.23	51.071		
10,200.00	7,550.00	12,945.96	10,300.00	53.23	58.61	89.89	-2,769.93	225.04	2,769.73	2,714.21	55.52	49.883		
10,300.00	7,550.00	13,045.96	10,300.00	54.67	59.92	89.89	-2,869.93	225.23	2,769.73	2,712.90	56.83	48.736		
10,400.00	7,550.00	13,145.96	10,300.00	56.12	61.24	89.89	-2,969.93	225.41	2,769.73	2,711.58	58.15	47.628		
10,500.00	7,550.00	13,245.96	10,300.00	57.59	62.58	89.89	-3,069.93	225.60	2,769.73	2,710.24	59.49	46.559		
10,600.00	7,550.00	13,345.96	10,300.00	59.06	63.94	89.89	-3,169.93	225.79	2,769.73	2,708.89	60.84	45.527		
10,700.00	7,550.00	13,445.96	10,300.00	60.54	65.31	89.89	-3,269.93	225.97	2,769.73	2,707.53	62.20	44.531		
10,800.00	7,550.00	13,545.96	10,300.00	62.04	66.69	89.89	-3,369.93	226.16	2,769.73	2,706.16	63.57	43.571		
10,900.00	7,550.00	13,645.96	10,300.00	63.54	68.08	89.89	-3,469.93	226.34	2,769.73	2,704.78	64.95	42.644		
11,000.00	7,550.00	13,745.96	10,300.00	65.05	69.49	89.89	-3,569.93	226.53	2,769.73	2,703.39	66.34	41.749		
11,100.00	7,550.00	13,845.96	10,300.00	66.56	70.91	89.89	-3,669.93	226.71	2,769.73	2,701.99	67.74	40.885		
11,200.00	7,550.00	13,945.96	10,300.00	68.08	72.33	89.89	-3,769.93	226.90	2,769.73	2,700.58	69.15	40.052		
11,300.00	7,550.00	14,045.96	10,300.00	69.61	73.77	89.89	-3,869.93	227.08	2,769.73	2,699.16	70.57	39.247		
11,400.00	7,550.00	14,145.96	10,300.00	71.15	75.22	89.89	-3,969.93	227.27	2,769.73	2,697.73	72.00	38.470		
11,500.00	7,550.00	14,245.96	10,300.00	72.69	76.67	89.89	-4,069.93	227.45	2,769.73	2,696.30	73.43	37.719		
11,600.00	7,550.00	14,345.96	10,300.00	74.23	78.13	89.89	-4,169.93	227.64	2,769.73	2,694.86	74.87	36.993		
11,700.00	7,550.00	14,445.96	10,300.00	75.78	79.60	89.89	-4,269.93	227.83	2,769.73	2,693.41	76.32	36.292		
11,800.00	7,550.00	14,545.96	10,300.00	77.33	81.08	89.89	-4,369.93	228.01	2,769.73	2,691.96	77.77	35.614		
11,900.00	7,550.00	14,645.96	10,300.00	78.89	82.57	89.89	-4,469.93	228.20	2,769.73	2,690.50	79.23	34.958		
12,000.00	7,550.00	14,745.96	10,300.00	80.45	84.06	89.89	-4,569.93	228.38	2,769.73	2,689.04	80.69	34.324		
12,100.00	7,550.00	14,845.96	10,300.00	82.02	85.55	89.89	-4,669.93	228.57	2,769.73	2,687.57	82.16	33.710		
12,200.00	7,550.00	14,945.96	10,300.00	83.59	87.05	89.89	-4,769.93	228.75	2,769.73	2,686.09	83.64	33.116		
12,300.00	7,550.00	15,045.96	10,300.00	85.16	88.56	89.89	-4,869.93	228.94	2,769.73	2,684.61	85.12	32.540		
12,307.49	7,550.00	15,053.45	10,300.00	85.28	88.68	89.89	-4,877.42	228.95	2,769.73	2,684.50	85.23	32.498		
12,381.32	7,550.00	15,122.89	10,300.00	86.44	89.73	89.13	-4,946.86	229.08	2,769.73	2,683.45	86.29	32.100		



MS Energy Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Reference Site: Warren 25-23S-27E RB Fed COM
Site Error: 0.00 usft
Reference Well: #121H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM Conroe
Offset TVD Reference: Offset Datum

Reference Depths are relative to WELL @ 3162.00usft (Patterson 297) Coordinates are relative to: #121H

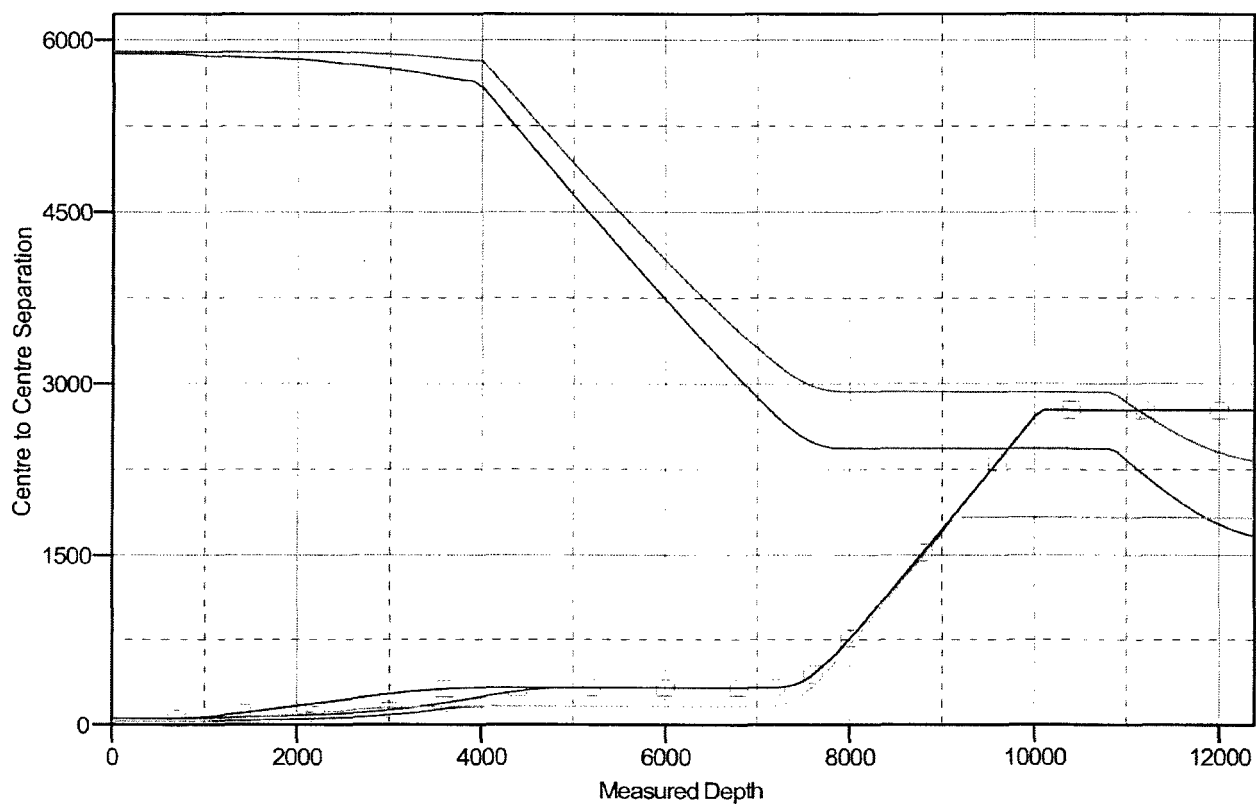
Offset Depths are relative to Offset Datum

Central Meridian is 104° 20' 0.000 W

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30

Grid Convergence at Surface is: 0.10°

Ladder Plot



LEGEND

● #221H Wellbore #1 Design #10
● #201H Wellbore #1 Design #30
● #205H Wellbore #1 Design #30
● #205H Wellbore #1 Design #10



MS Energy Services
Anticollision Report



Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Reference Site: Warren 25-23S-27E RB Fed COM
Site Error: 0.00 usft
Reference Well: #121H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #3

Local Co-ordinate Reference: Well #121H
TVD Reference: WELL @ 3162.00usft (Patterson 297)
MD Reference: WELL @ 3162.00usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM Conroe
Offset TVD Reference: Offset Datum

Reference Depths are relative to WELL @ 3162.00usft (Patterson 297) Coordinates are relative to: #121H

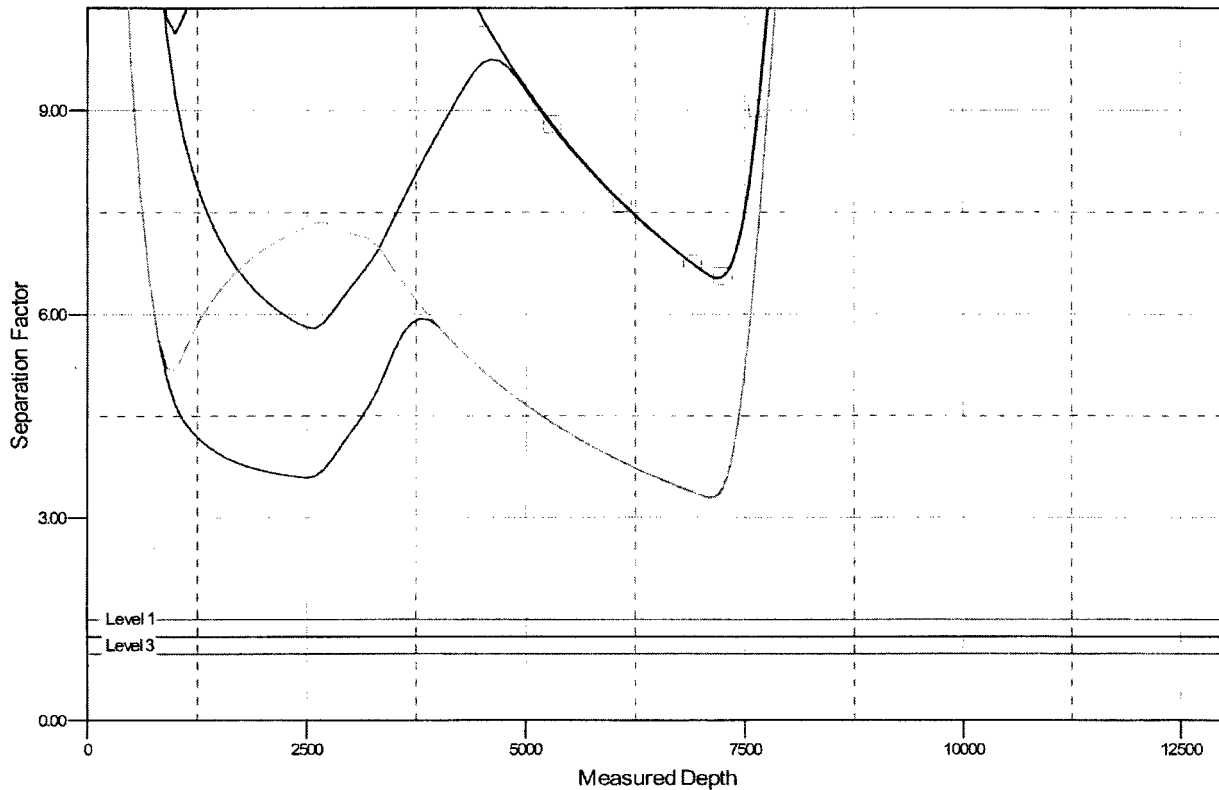
Offset Depths are relative to Offset Datum

Central Meridian is 104° 20' 0.000 W

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30

Grid Convergence at Surface is: 0.10°

Separation Factor Plot



LEGEND

● #221H (Wellbore #1, Design #3) V ● #209H (Wellbore #1, Design #3) V ● #229H (Wellbore #1, Design #3) V
● #238H (Wellbore #1, Design #1) V ● #203H (Wellbore #1, Design #1) V ● #223H (Wellbore #1, Design #3) V

Matador Production Company
 Warren Fed Com 121H
 SHL 170' FNL & 770' FWL Sec. 25
 BHL 240' FSL & 660' FWL Sec. 25
 T. 23 S., R. 27 E., Eddy County, NM

DRILL PLAN PAGE 1

Drilling Program

1. ESTIMATED TOPS

Formation	TVD	MD	Bearing
Quaternary	000	000	water
Salado/Salt	500	500	salt
Castile anhydrite	759	759	barren
(KOP	800	800	N/A)
Lamar limestone	2343	2345	barren
Bell Canyon sandstone	2408	2409	barren
Cherry Canyon sandstone	3159	3162	hydrocarbons
Brushy Canyon sandstone	4336	4338	hydrocarbons
Bone Spring Limestone	5828	5830	hydrocarbons
1 st Bone Spring Carbonate	6497	6503	hydrocarbons
1 st Bone Spring Sand	6867	6871	hydrocarbons
2 nd Bone Spring Carbonate	7069	7073	hydrocarbons
2 nd Bone Spring Sand	7515	7680	hydrocarbons & goal
TD	7550	12381	hydrocarbons

2. NOTABLE ZONES

Second Bone Spring sand is the goal for this well. Hole will extend south of the last perforation point to allow for pump installation. All perforations will be $\geq 330'$ from the dedication perimeter. A windmill is $\approx 2700'$ SSW, but it is not in the State Engineer's database. Closest water well (C 00010) in the database is 3404' southeast. Shallowest perforation is 60'.

Matador Production Company
Warren Fed Com 121H
SHL 170' FNL & 770' FWL Sec. 25
BHL 240' FSL & 660' FWL Sec. 25
T. 23 S., R. 27 E., Eddy County, NM

DRILL PLAN PAGE 2

3. PRESSURE CONTROL

A 5K BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and 1 annular preventer will be installed. The BOP will be used below surface casing to TD. See attached BOP and choke manifold diagrams.

An accumulator complying with Onshore Order 2 requirements for the BOP stack pressure rating will be present. Rotating head will be installed as needed.

Pressure tests will be conducted before drilling out from under all casing strings. BOP will be inspected and operated as required by Onshore Order 2. Kelly cock and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position.

A third party company will test the BOPs.

After surface casing is set and the BOP is nipped up, then the BOP pressure tests will be made to 250 psi low and 2000 psi high. Intermediate pressure tests will be made to 250 psi low and 3000 psi high. Annular preventer will be tested to 250 psi low and 1000 psi high on the surface casing, and 250 psi low and 2500 psi high on the intermediate casing.

In the case of running a speed head with landing mandrel for 9.625" casing, after surface casing is set, BOP test pressures will be 250 psi low and 3000 psi high. Annular will be tested to 250 psi low and 2500 psi high. Wellhead seals will be tested to 5000 psi once the 9.625" casing has been landed and cemented.

Matador requests a variance to use a speed head. Speed head diameter range is 13.375" x 9.625" x 5.5" x 2.875".

Matador requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. If the specific hose is not available, then one of equal or higher rating will be used.

Matador Production Company
 Warren Fed Com 121H
 SHL 170' FNL & 770' FWL Sec. 25
 BHL 240' FSL & 660' FWL Sec. 25
 T. 23 S., R. 27 E., Eddy County, NM

DRILL PLAN PAGE 3

4. CASING & CEMENT

All casing will be API and new.

Hole O. D.	Set MD	Set TVD	Casing O. D.	Weight (lb/ft)	Grade	Joint	Collapse	Burst	Tension
17.5"	0' - 475'	0' - 475'	13.375"	54.5	J-55	BTC	1.125	1.125	1.8
12.25"	0' - 2450'	0' - 2446'	9.625"	40	J-55	BTC	1.125	1.125	1.8
8.75"	0' - 12381'	0' - 7550'	5.5"	20	P-110	BTC/TXP	1.125	1.125	1.8

Casing Name	Type	Sacks	Yield	Cu. Ft.	Weight	Blend
Surface	Lead	100	1.82	182	12.8	Class C + Bentonite + 2% CaCl ₂ + 3% NaCl + LCM
	Tail	350	1.38	483	14.8	Class C + 5% NaCl + LCM
TOC = GL		100% Excess			Centralizers per Onshore Order 2.III.B.1f	
Intermediate	Lead	510	2.13	1086	12.6	Class C + Bentonite + 1% CaCl ₂ + 8% NaCl + LCM
	Tail	270	1.38	372	14.8	Class C + 5% NaCl + LCM
TOC = GL		100% Excess			2 on btm jt, 1 on 2nd jt, 1 every 4th jt to GL	
Production	Lead	830	2.35	1950	11.5	TXI + Fluid Loss + Dispersant + Retarder + LCM
	Tail	1450	1.39	2015	13.2	TXI + Fluid Loss + Dispersant + Retarder + LCM
TOC = 1400'		35% Excess			2 on btm jt, 1 on 2nd jt, 1 every other jt to top of tail cement (500' above TOC)	

Matador Production Company
Warren Fed Com 121H
SHL 170' FNL & 770' FWL Sec. 25
BHL 240' FSL & 660' FWL Sec. 25
T. 23 S., R. 27 E., Eddy County, NM

DRILL PLAN PAGE 4

5. MUD PROGRAM

An electronic Pason mud monitoring system complying with Onshore Order 1 will be used. All necessary mud products (barite, bentonite, LCM) for weight addition and fluid loss control will be on location at all times. Mud program is subject to change due to hole conditions. A closed loop system will be used.

Type	Interval	lb/gal	Viscosity	Fluid Loss
fresh water spud	0' - 475'	8.3	28	NC
brine water	475' - 2450'	10.0	30-32	NC
fresh water & cut brine	2450' - 12381'	9.0	30-32	NC

6. CORES, TESTS, & LOGS

No core or drill stem test is planned.

A 2-person mud-logging program will be used from $\approx 5600'$ to TD.

No electric logs are planned at this time. GR will be collected through the MWD tools from intermediate casing to TD. CBL with CCL will be run as far as gravity will let it fall to TOC.

7. DOWN HOLE CONDITIONS

No abnormal pressure or temperature is expected. Maximum expected bottom hole pressure is ≈ 4000 psi. Expected bottom hole temperature is $\approx 140^\circ$ F.

Matador does not anticipate that there will be enough H_2S from surface to the Bone Spring to meet BLM's minimum requirements for submitting an " H_2S Drilling Operation Plan" or "Public Protection Plan" for drilling and completing this well. Since Matador has an H_2S safety package on all wells, an " H_2S Drilling Operations Plan" is attached. Adequate flare lines will be installed off the

Matador Production Company
Warren Fed Com 121H
SHL 170' FNL & 770' FWL Sec. 25
BHL 240' FSL & 660' FWL Sec. 25
T. 23 S., R. 27 E., Eddy County, NM

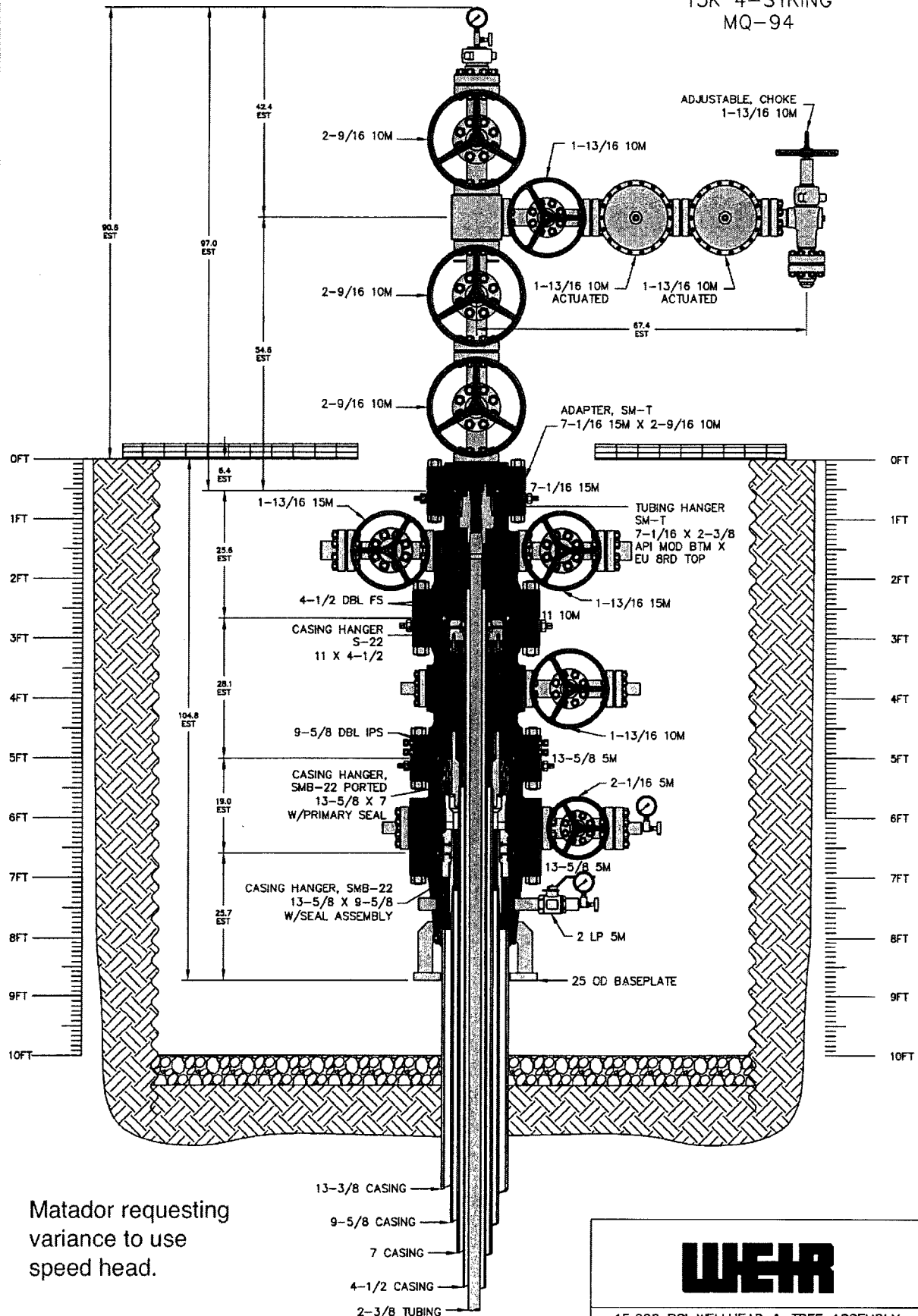
DRILL PLAN PAGE 5

mud/gas separator where gas will be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used.

8. OTHER INFORMATION

Anticipated spud date is upon approval. It is expected it will take \approx 3 months to drill and complete the well.

MATADOR
15K 4-STRING
MQ-94



Matador requesting
variance to use
speed head.

NOTE:
DIMENSIONS SHOWN ON THIS DRAWING ARE
ESTIMATES ONLY AND CAN VARY SIGNIFICANTLY
DEPENDING ON RAW MATERIAL LENGTHS.
NO GUARANTEE OF STACKUP HEIGHT IS IMPLIED.
DIMENSIONS SHOWN SHOULD BE CONSIDERED
FOR REFERENCE PURPOSES ONLY.

RESTRICTED CONFIDENTIAL DOCUMENT

THIS DRAWING AND ALL INFORMATION SHOWN HEREON ARE THE
EXCLUSIVE PROPERTY OF SEABOARD INTERNATIONAL, INC. AND ARE
SUBMITTED ON A CONFIDENTIAL BASIS ONLY. THE RECIPIENT AGREES
NOT TO REPRODUCE THE DRAWING, TO RETURN IT UPON REQUEST, AND
THAT NO DISCLOSURE OF THE DRAWING OR THE INFORMATION SHOWN
HEREON WILL BE MADE TO A THIRD PARTY WITHOUT PRIOR WRITTEN
CONSENT OF SEABOARD INTERNATIONAL, INC.

WEIR

15,000 PSI WELLHEAD & TREE ASSEMBLY
13-3/8 X 9-5/8 X 7 X 4-1/2 X 2-3/8

DRAWN BY:	RPL	SCALE:	1:10	DATE:	18JAN16	REV:	
CHECKED BY:		DRAWING NO.:	P-20986				
APPROVED BY:							



APD ID: 10400012448

Submission Date: 03/27/2017

Highlighted data
reflects the most
recent changes

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Warren_121H_Road_Map_07-20-2017.pdf

Existing Road Purpose: ACCESS, FLUID TRANSPORT

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

Warren_121H_Road_Map_07-25-2017.pdf

New road type: LOCAL

Length: 400

Feet

Width (ft.): 30

Max slope (%): 1

Max grade (%): 1

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: CROWN AND DITCH SURFACE WITH CALICHE

New road access plan or profile prepared? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: CALICHE

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: GRADER

Access other construction information:

Access miscellaneous information:

Number of access turnouts:

Access turnout map:

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: NO DRAINAGE CROSSED

Road Drainage Control Structures (DCS) description: NONE NEEDED

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

Warren_121H_Well_Map_03-27-2017.PDF

Existing Wells description:

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description:

Production Facilities map:

Warren_121H_Production_Diagram_03-27-2017.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

Water source use type: DUST CONTROL,
INTERMEDIATE/PRODUCTION CASING, STIMULATION, SURFACE
CASING

Water source type: GW WELL

Describe type:

Source longitude:

Source latitude:

Source datum:

Water source permit type: WATER WELL

Source land ownership: PRIVATE

Water source transport method: PIPELINE,TRUCKING

Source transportation land ownership: PRIVATE

Water source volume (barrels): 15000

Source volume (acre-feet): 1.9333965

Source volume (gal): 630000

Water source and transportation map:

Warren_121H_Water_Source_Map_03-27-2017.pdf

Water source comments:

New water well? NO

New Water Well Info

Well latitude:

Well Longitude:

Well datum:

Well target aquifer:

Est. depth to top of aquifer(ft):

Est thickness of aquifer:

Aquifer comments:

Aquifer documentation:

Well depth (ft):

Well casing type:

Well casing outside diameter (in.):

Well casing inside diameter (in.):

New water well casing?

Used casing source:

Drilling method:

Drill material:

Grout material:

Grout depth:

Casing length (ft.):

Casing top depth (ft.):

Well Production type:

Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

Section 6 - Construction Materials

Construction Materials description: CALICHE

Construction Materials source location attachment:

Warren_121H_Water_Source_Map_03-27-2017.pdf

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: CUTTINGS AND MUD

Amount of waste: 15000 barrels

Waste disposal frequency : Daily

Safe containment description: STEEL TANKS

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** PRIVATE

Disposal type description:

Disposal location description: HALFWAY, NM

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.) **Reserve pit width (ft.)**

Reserve pit depth (ft.) **Reserve pit volume (cu. yd.)**

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? NO

Description of cuttings location

Cuttings area length (ft.) **Cuttings area width (ft.)**

Cuttings area depth (ft.) **Cuttings area volume (cu. yd.)**

Is at least 50% of the cuttings area in cut?

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Warren_121H_Well_Site_Layout_06-08-2017.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: WARREN SLOT

Multiple Well Pad Number: 1

Recontouring attachment:

Warren_121H_Recontouring_Plat_03-27-2017.pdf

Drainage/Erosion control construction: TOPSOIL PILE WILL BE BERM ON UPHILL SIDE

Drainage/Erosion control reclamation: WILL HARROW ON CONTOUR

Wellpad long term disturbance (acres): 2.37

Wellpad short term disturbance (acres): 3.65

Access road long term disturbance (acres): 0.28

Access road short term disturbance (acres): 0.28

Pipeline long term disturbance (acres): 0

Pipeline short term disturbance (acres): 0.6456612

Other long term disturbance (acres): 0

Other short term disturbance (acres): 0

Total long term disturbance: 2.65

Total short term disturbance: 4.575661

Reconstruction method: Interim reclamation will shrink the pad 35% by removing caliche and reclaiming the south side (130' x 430'), leaving 2.37 acres for 5 wells, truck turn around, and production equipment. Disturbed areas will be contoured to match pre-construction grades. Soil and brush will be evenly spread over disturbed areas. Disturbed areas will be seeded in accordance with BLM requirements. Enough stockpiled topsoil will be retained to cover the remainder of the pad when the wells are plugged. Once the last well is plugged, then the remainder of the pad and new road will be similarly reclaimed. Noxious weeds will be controlled.

Topsoil redistribution: EVENLY

Soil treatment: AS REQUIRED BY LANDOWNER

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

Existing Vegetation at the well pad:

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road:

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline:

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances:

Existing Vegetation Community at other disturbances attachment:

Non native seed used?

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project?

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation?

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Seed type:

Seed source:

Seed name:

Source name:

Source address:

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre:

Proposed seeding season:

Seed Summary

Total pounds/Acre:

Seed Type

Pounds/Acre

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name:

Last Name:

Phone:

Email:

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? YES

Existing invasive species treatment description: HERBICIDE

Existing invasive species treatment attachment:

Weed treatment plan description: HERBICIDE

Weed treatment plan attachment:

Monitoring plan description: INSPECTION BY PUMPER

Monitoring plan attachment:

Success standards: AS REQUIRED BY LANDOWNER

Pit closure description: NO PIT

Pit closure attachment:

Section 11 - Surface Ownership

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: PRIVATE OWNERSHIP

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Fee Owner: ANTONIO ONSUREZ

Fee Owner Address: PO BOX 598 LOVING, NM 88256

Phone: (575)706-2280

Email:

Surface use plan certification: YES

Surface use plan certification document:

Warren_121H_Surface_Use_Plan_Certification_03-27-2017.pdf

Surface access agreement or bond: Agreement

Surface Access Agreement Need description: SURFACE USE AGREEMENT WITH OWNER

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Fee Owner: WILLIAM COLWELL

Fee Owner Address: 241 COLWELL RANCH RD
CARLSBAD, NM 88220

Phone: (575)826-3384

Email:

Surface use plan certification: YES

Surface use plan certification document:

Warren_121H_Surface_Use_Plan_Certification_03-27-2017.pdf

Surface access agreement or bond: Agreement

Surface Access Agreement Need description: SURFACE AGREEMENT WITH OWNER

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

Disturbance type: PIPELINE

Describe:

Surface Owner: PRIVATE OWNERSHIP

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Fee Owner: ANTONIO ONSUREZ

Fee Owner Address: PO BOX 598 LOVING, NM 88256

Phone: (575)706-2280

Email:

Surface use plan certification: YES

Surface use plan certification document:

Warren_121H_Surface_Use_Plan_Certification_03-27-2017.pdf

Surface access agreement or bond: Agreement

Surface Access Agreement Need description: SURFACE USE AGREEMENT WITH OWNER

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

Fee Owner: WILLIAM COLWELL

Phone: (575)826-3384

Surface use plan certification: YES

Surface use plan certification document:

Warren_121H_Surface_Use_Plan_Certification_03-27-2017.pdf

Fee Owner Address: 241 COLWELL RANCH RD

CARLSBAD, NM 88220

Email:

Surface access agreement or bond: Agreement

Surface Access Agreement Need description: SURFACE USE AGREEMENT WITH OWNER

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Disturbance type: OTHER

Describe: POWERLINE

Surface Owner: PRIVATE OWNERSHIP

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

Fee Owner: ANTONIO ONSUREZ

Fee Owner Address: PO BOX 598 LOVING, NM 88256

Phone: (575)706-2280

Email:

Surface use plan certification: YES

Surface use plan certification document:

Warren_121H_Surface_Use_Plan_Certification_03-27-2017.pdf

Surface access agreement or bond: Agreement

Surface Access Agreement Need description: SURFACE USE AGREEMENT WITH OWNER

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Fee Owner: WILLIAM COLWELL

Fee Owner Address: 241 COLWELL RANCH RD
CARLSBAD, NM 88220

Phone: (575)826-3384

Email:

Surface use plan certification: YES

Surface use plan certification document:

Warren_121H_Surface_Use_Plan_Certification_03-27-2017.pdf

Surface access agreement or bond: Agreement

Surface Access Agreement Need description: SURFACE USE AGREEMENT WITH OWNER

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Disturbance type: WELL PAD

Describe:

Surface Owner: PRIVATE OWNERSHIP

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: WARREN FED COM

Well Number: 121H

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Fee Owner: WILLIAM COLWELL

Phone: (575)826-3384

Surface use plan certification: YES

Surface use plan certification document:

Warren_121H_Surface_Use_Plan_Certification_03-27-2017.pdf

Fee Owner Address: 241 COLWELL RANCH RD
CARLSBAD, NM 88220

Email:

Surface access agreement or bond: Agreement

Surface Access Agreement Need description: SURFACE USE AGREEMENT WITH OWNER

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Section 12 - Other Information

Right of Way needed? NO

Use APD as ROW?

ROW Type(s):

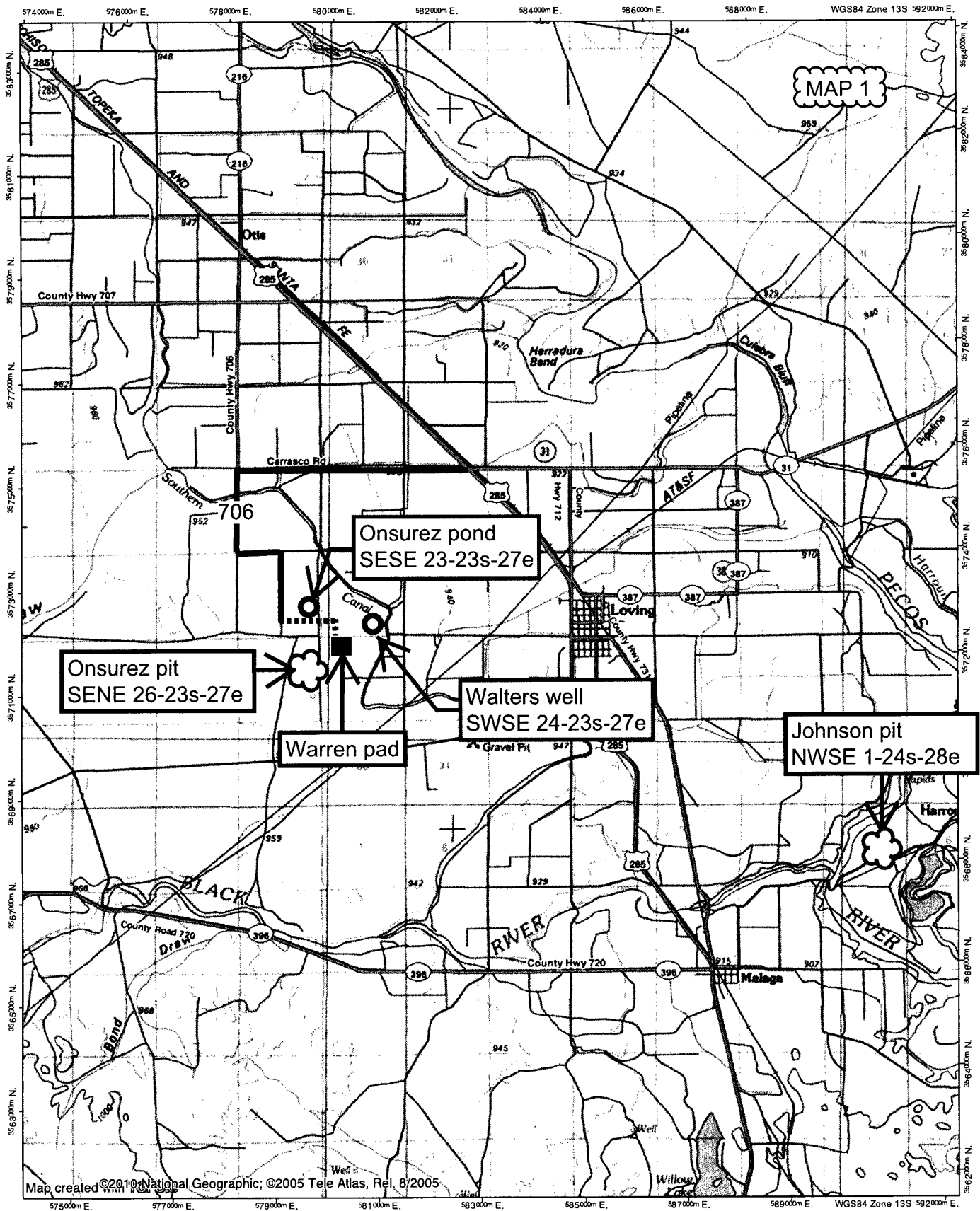
ROW Applications

SUPO Additional Information: Deficiency Letter Dated 7/24/17: See Map 4 of Road Map attachment for requested pipeline and power line plats. See Item 4 of Surface Use Plan for pipeline specifications.

Use a previously conducted onsite? YES

Previous Onsite Information: ONSITE INSPECTION WAS HELD WITH VANCE WOLF (BLM) ON NOVEMBER 29, 2016.

Other SUPO Attachment



**NATIONAL
GEOGRAPHIC**

0.0 0.5 1.0 1.5 2.0 2.5 3.0 miles
0 1 2 3 4 5 km

TN + MN
7°
03/16/17

MAP 2

1 mile radius

1 mile radius

SHL

BHL

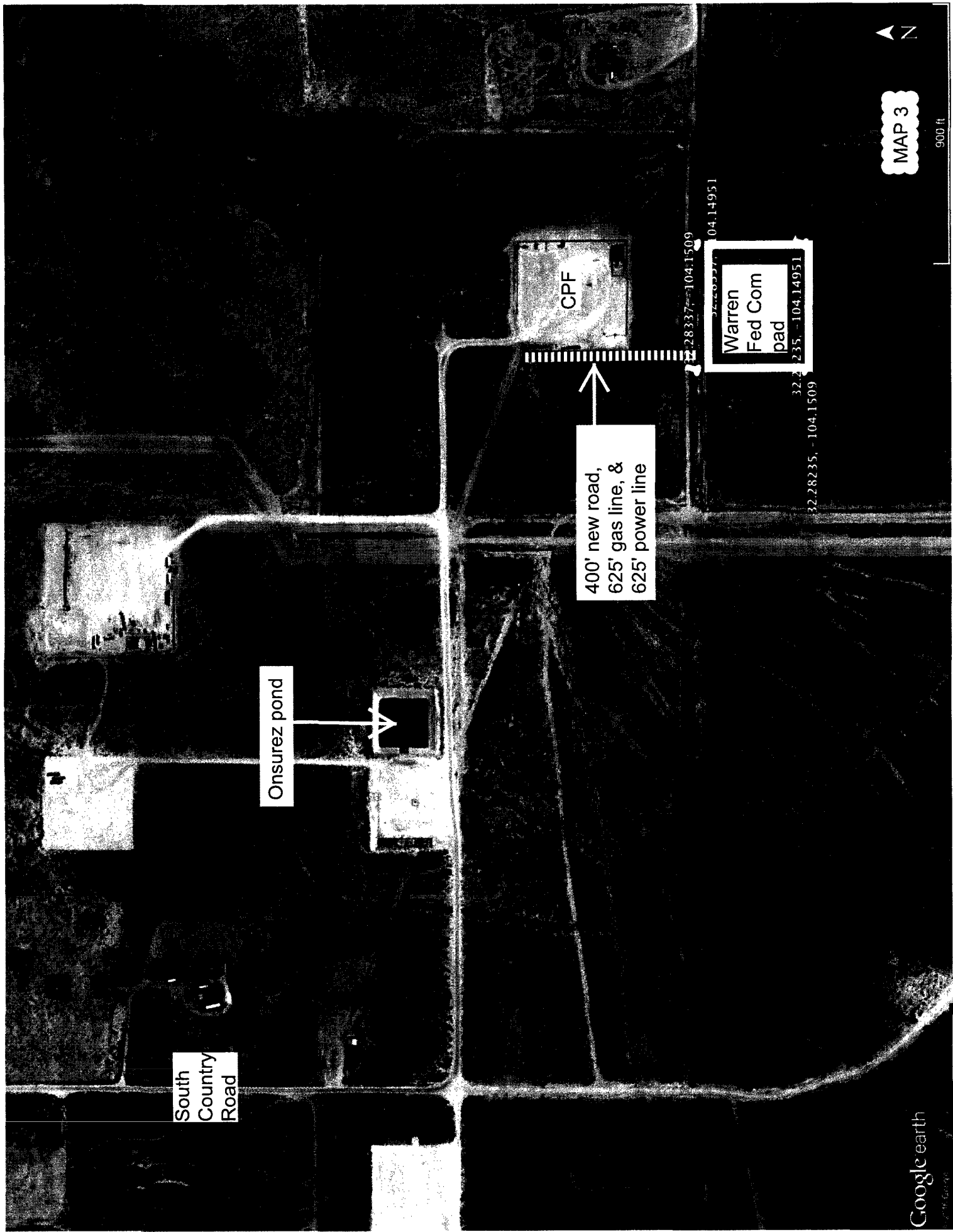
LEGEND

- New
- ★ Active
- ⊕ P&A
- ⊙ INJ
- ⊙ SWD
- ⊙ Water

Quad: OTIS
Scale: 1 inch = 2,000 ft.



(C) Copyright 2016, Trimble



South
Country
Road

Onsurez pond

CPF

400' new road,
625' gas line, &
625' power line

32.28337, -104.1509

Warren
Fed Com
pad

32.28337, -104.14951

MAP 3

900 ft

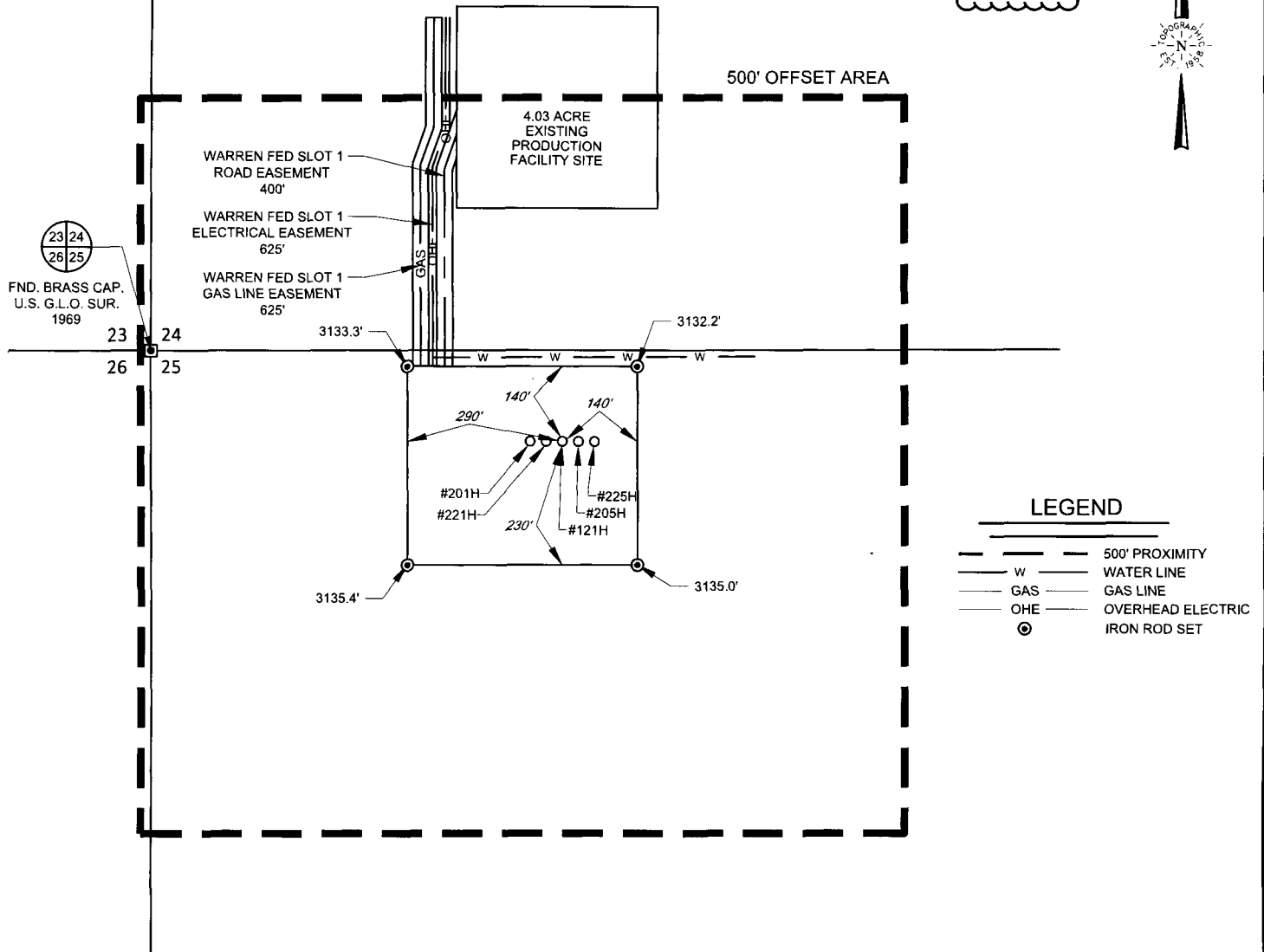
Google earth

SCALE: 1" = 300'

0' 150' 300'

SECTION 25, TOWNSHIP 23-S, RANGE 27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

MAP 4



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7548
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM



Michael Blake Brown, P.S. No. 18329
DECEMBER 6, 2016

WARREN FED COM
#121H
PROXIMITY MAP

REVISION:

A.V.F. 08/05/2016

A.V.F. 08/18/2016

DATE: 08/05/2016 J.S.T. 08/19/2016

FILE: LO WARREN_FED_COM_121H_REV6 E.A.H. 10/21/2016

DRAWN BY: A.V.F. G.J.U. 12/06/2016

SHEET:

NOTES:

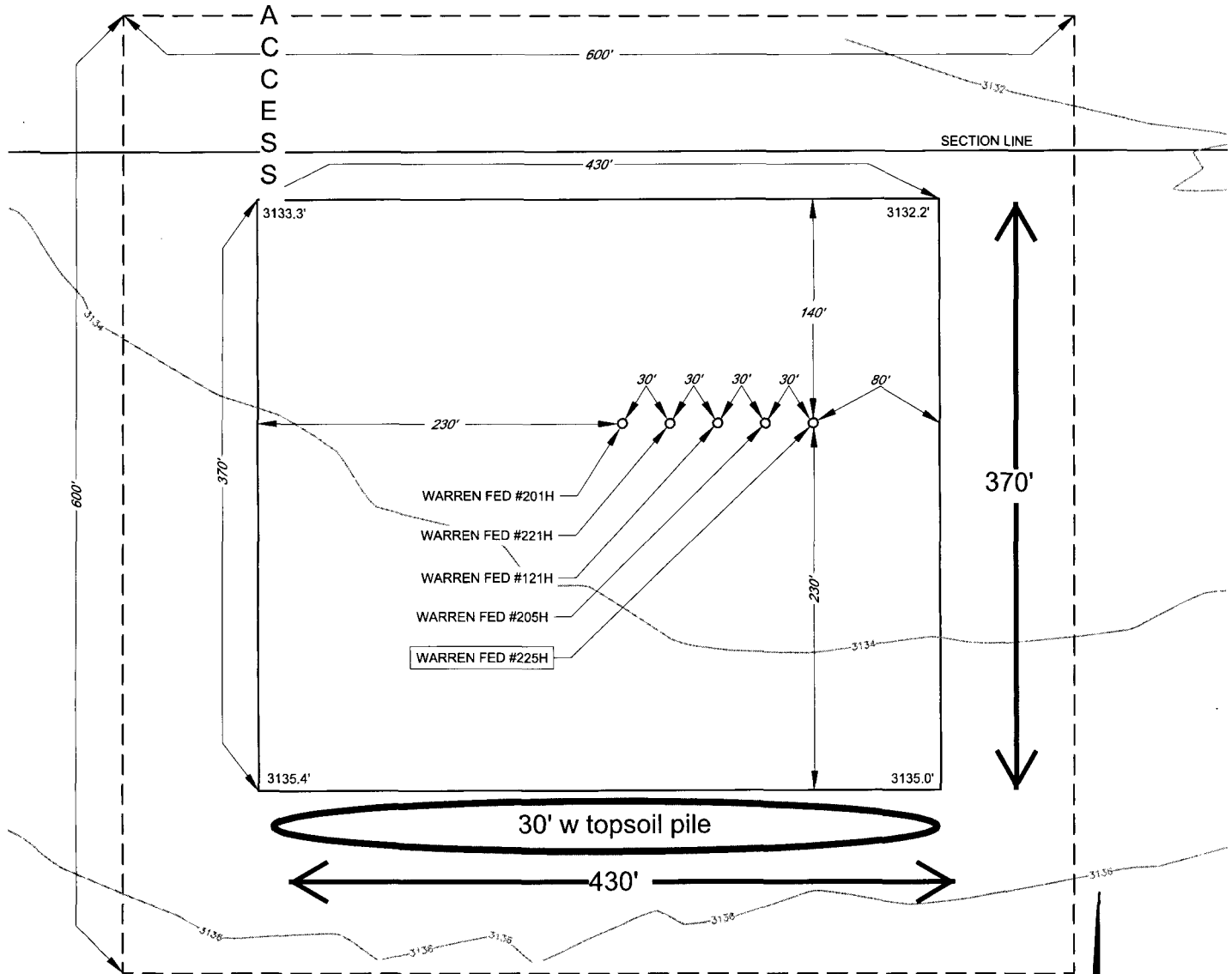
1. ORIGINAL DOCUMENT SIZE: 8.5" X 11"
2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1927.
3. CERTIFICATION IS MADE ONLY TO THE LOCATION OF THIS EASEMENT, IN RELATION TO THE EVIDENCE FOUND DURING A FIELD SURVEY, MADE ON THE GROUND, UNDER MY SUPERVISION, AND USING DOCUMENTATION PROVIDED BY MATADOR RESOURCES, INC. ONLY UTILITIES/EASEMENTS THAT WERE VISIBLE ON THE DATE OF THIS SURVEY, WITHIN/ADJOINING THIS EASEMENT, HAVE BEEN LOCATED AS SHOWN HEREON OF WHICH I HAVE KNOWLEDGE. THIS CERTIFICATION IS LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE, AND MADE FOR THIS TRANSACTION ONLY.



MAP 5

SECTION 25, TOWNSHIP 23-S, RANGE 27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

DETAIL VIEW
SCALE: 1" = 100'



LEASE NAME & WELL NO.: WARREN FED #225H
#225H LATITUDE N 32.2828228 #225H LONGITUDE W 104.1492537

LEGEND

--- ARCH SITE

SCALE: 1" = 100'
0' 50' 100'

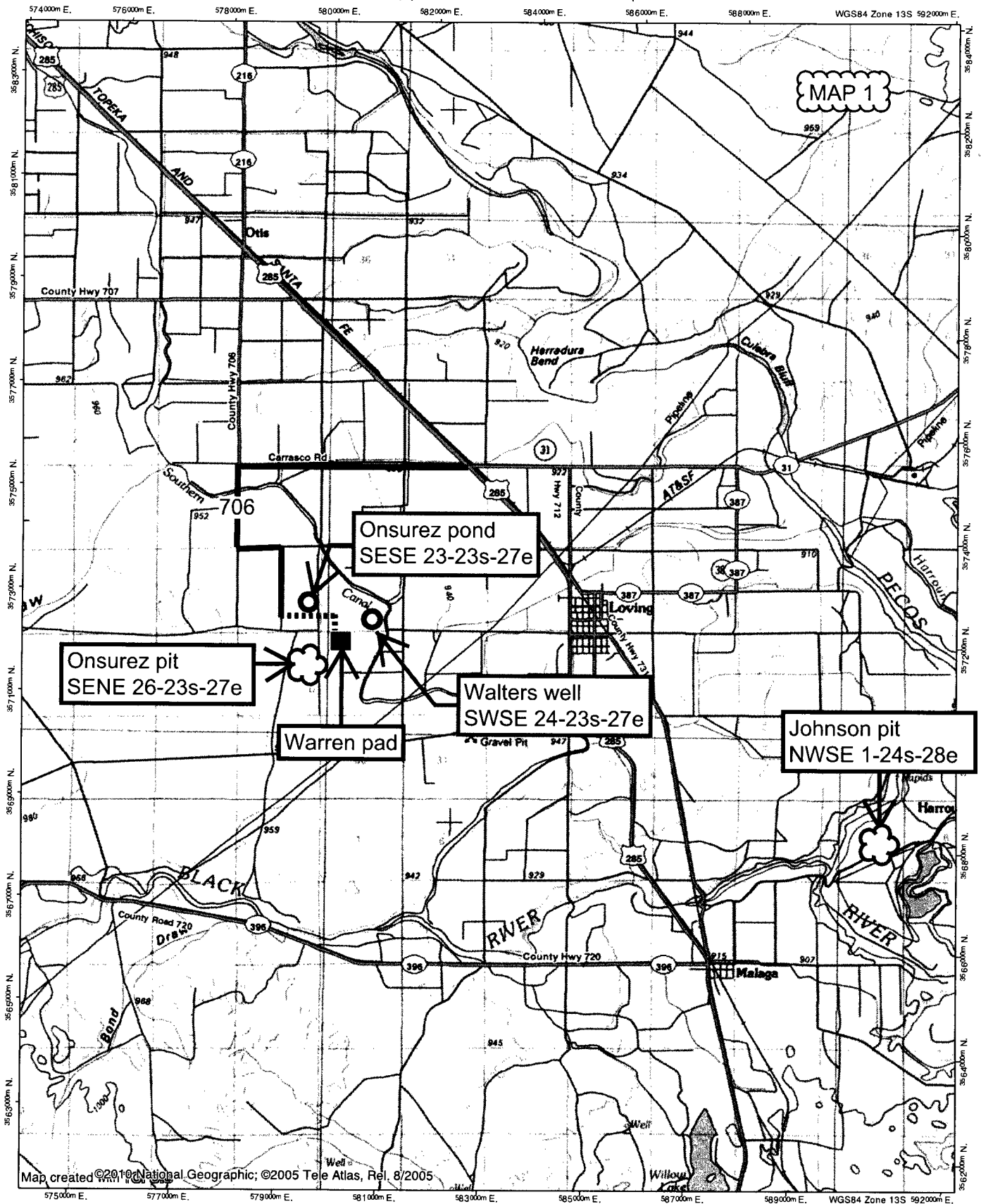
ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID
BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE OF THE
NORTH AMERICAN DATUM 1927, U.S. SURVEY FEET

THIS PROPOSED PAD SITE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER
MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY,
AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE AND
LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS
NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.



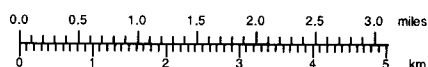
TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7548
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM



Map created ©2010 National Geographic; ©2005 Tele Atlas, Rel. 8/2005

**NATIONAL
GEOGRAPHIC**



TN+MN

7°

03/16/17

MAP 2

1 mile radius

1 mile radius

SHL

BHL

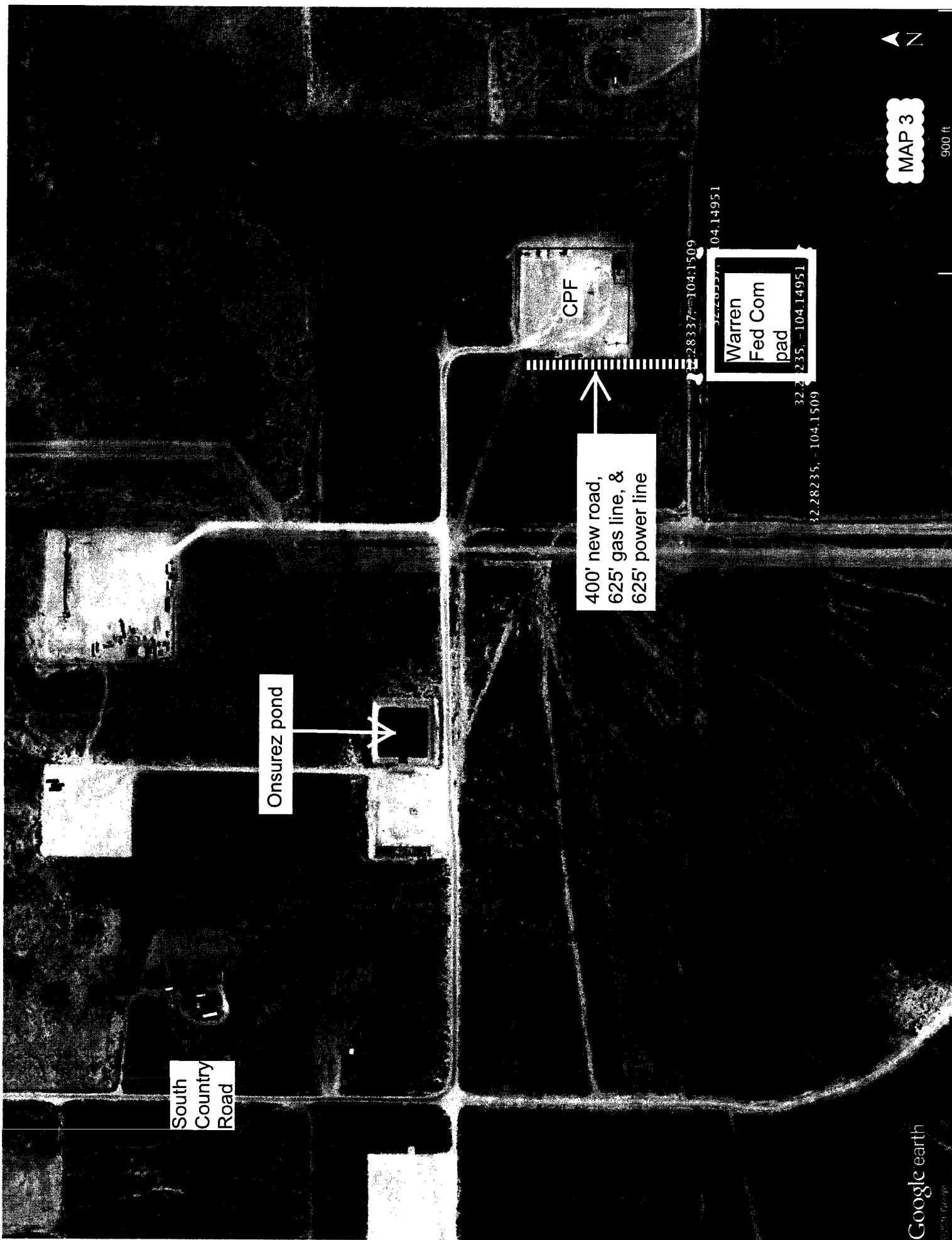
LEGEND

- New
- ✦ Active
- ⊕ P&A
- ⊙ INJ
- ⊙ SWD
- ⊙ Water

Quad: OTIS
Scale: 1 inch = 2,000 ft.



© Copyright 2016, Trimble



South
Country
Road

Onsurez pond

CPF

400' new road,
625' gas line, &
625' power line

Warren
Fed Com
pad

32.28235, -104.1509
32.28337, -104.1509
32.28337, -104.14951

MAP 3

900 ft

Google earth

SCALE: 1" = 300'

0' 150' 300'

SECTION 25, TOWNSHIP 23-S, RANGE 27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

MAP 4



500' OFFSET AREA

4.03 ACRE
EXISTING
PRODUCTION
FACILITY SITE

WARREN FED SLOT 1
ROAD EASEMENT
400'

WARREN FED SLOT 1
ELECTRICAL EASEMENT
625'

WARREN FED SLOT 1
GAS LINE EASEMENT
625'

FND. BRASS CAP.
U.S. G.L.O. SUR.
1969

23

24

26

25

3133.3'

3132.2'

3135.4'

3135.0'

#201H
#221H
#225H
#205H
#121H

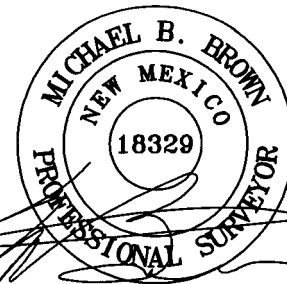
LEGEND

- 500' PROXIMITY
- W — WATER LINE
- GAS — GAS LINE
- OHE — OVERHEAD ELECTRIC
- ⊙ IRON ROD SET



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7548
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM



Michael Blake Brown, P.S. No. 18329

DECEMBER 6, 2016

WARREN FED COM
#121H
PROXIMITY MAP

REVISION:

A.V.F. 08/05/2016

A.V.F. 08/18/2016

J.S.T. 08/19/2016

E.A.H. 10/21/2016

G.J.U. 12/06/2016

DATE: 08/05/2016

FILE: LO_WARREN_FED_COM_121H_REV6

DRAWN BY: A.V.F.

SHEET:

NOTES:

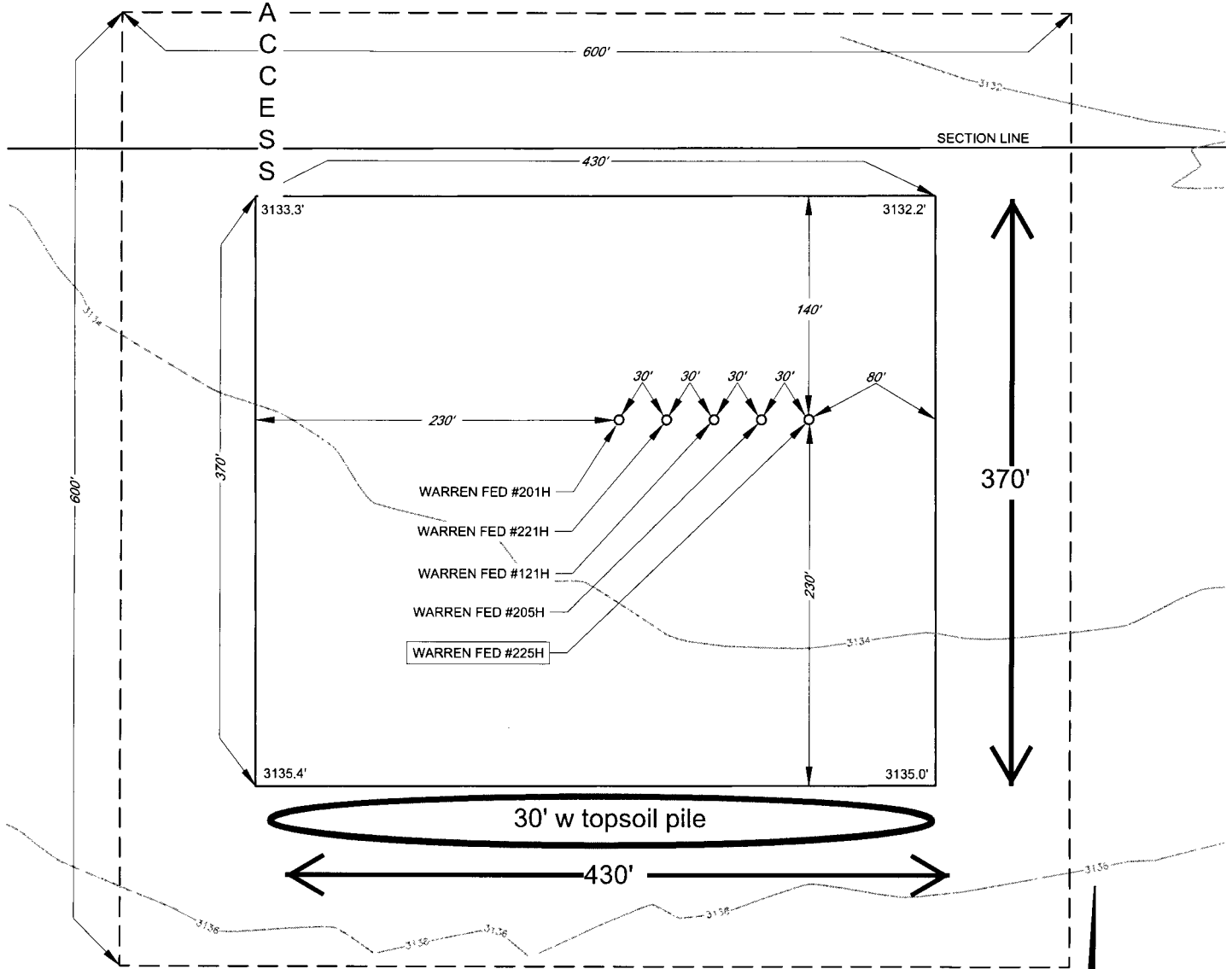
1. ORIGINAL DOCUMENT SIZE: 8.5" X 11"
2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1927.
3. CERTIFICATION IS MADE ONLY TO THE LOCATION OF THIS EASEMENT, IN RELATION TO THE EVIDENCE FOUND DURING A FIELD SURVEY, MADE ON THE GROUND, UNDER MY SUPERVISION, AND USING DOCUMENTATION PROVIDED BY MATADOR RESOURCES, INC. ONLY UTILITIES/EASEMENTS THAT WERE VISIBLE ON THE DATE OF THIS SURVEY, WITHIN/ADJOINING THIS EASEMENT, HAVE BEEN LOCATED AS SHOWN HEREON OF WHICH I HAVE KNOWLEDGE. THIS CERTIFICATION IS LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE, AND MADE FOR THIS TRANSACTION ONLY.



MAP 5

SECTION 25, TOWNSHIP 23-S, RANGE 27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

DETAIL VIEW
SCALE: 1" = 100'



LEASE NAME & WELL NO.: WARREN FED #225H
#225H LATITUDE N 32.2828228 #225H LONGITUDE W 104.1492537

LEGEND

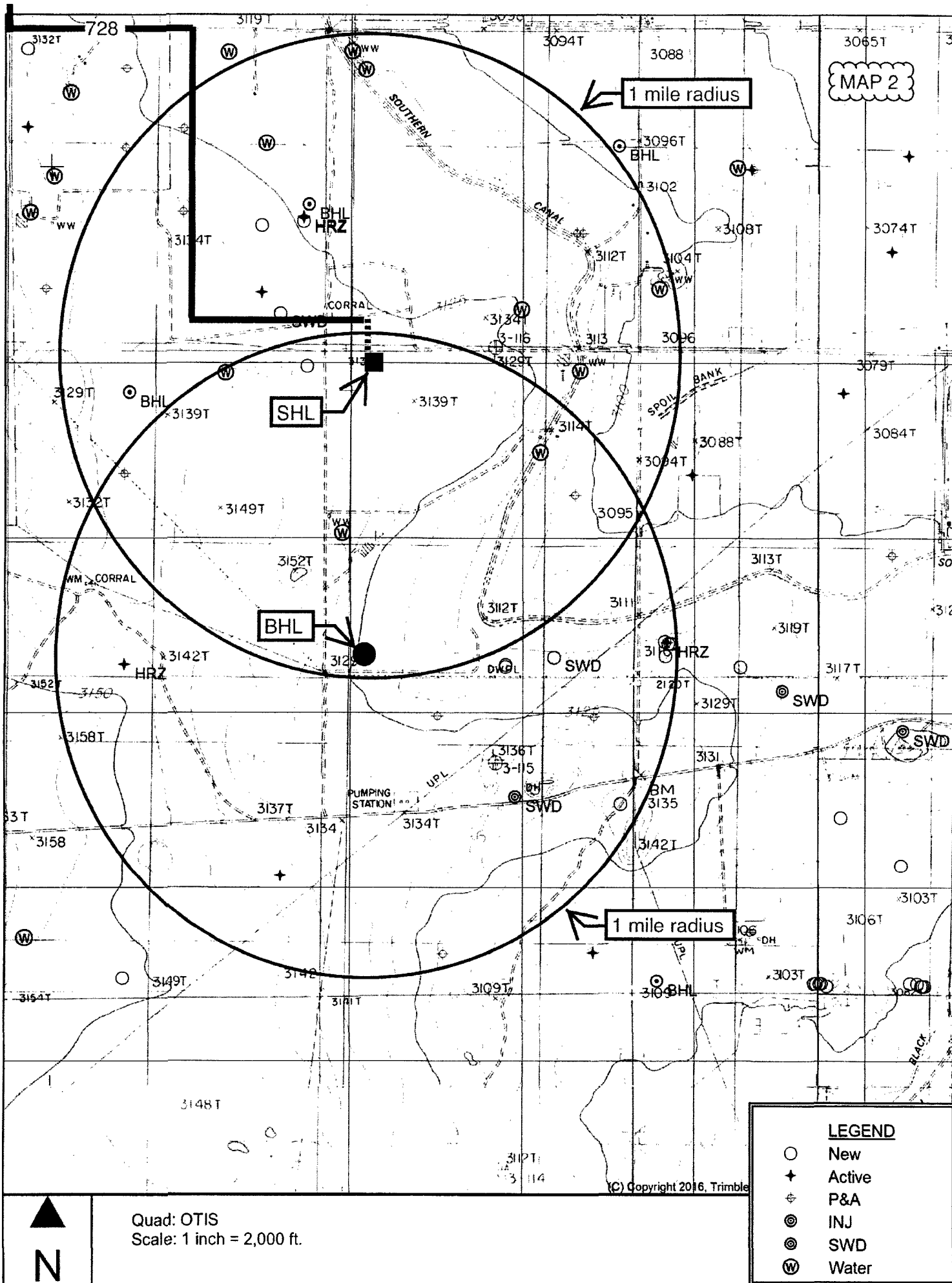
--- ARCH SITE

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID
BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE OF THE
NORTH AMERICAN DATUM 1927, U.S. SURVEY FEET

THIS PROPOSED PAD SITE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER
MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY,
AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE AND
LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS
NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

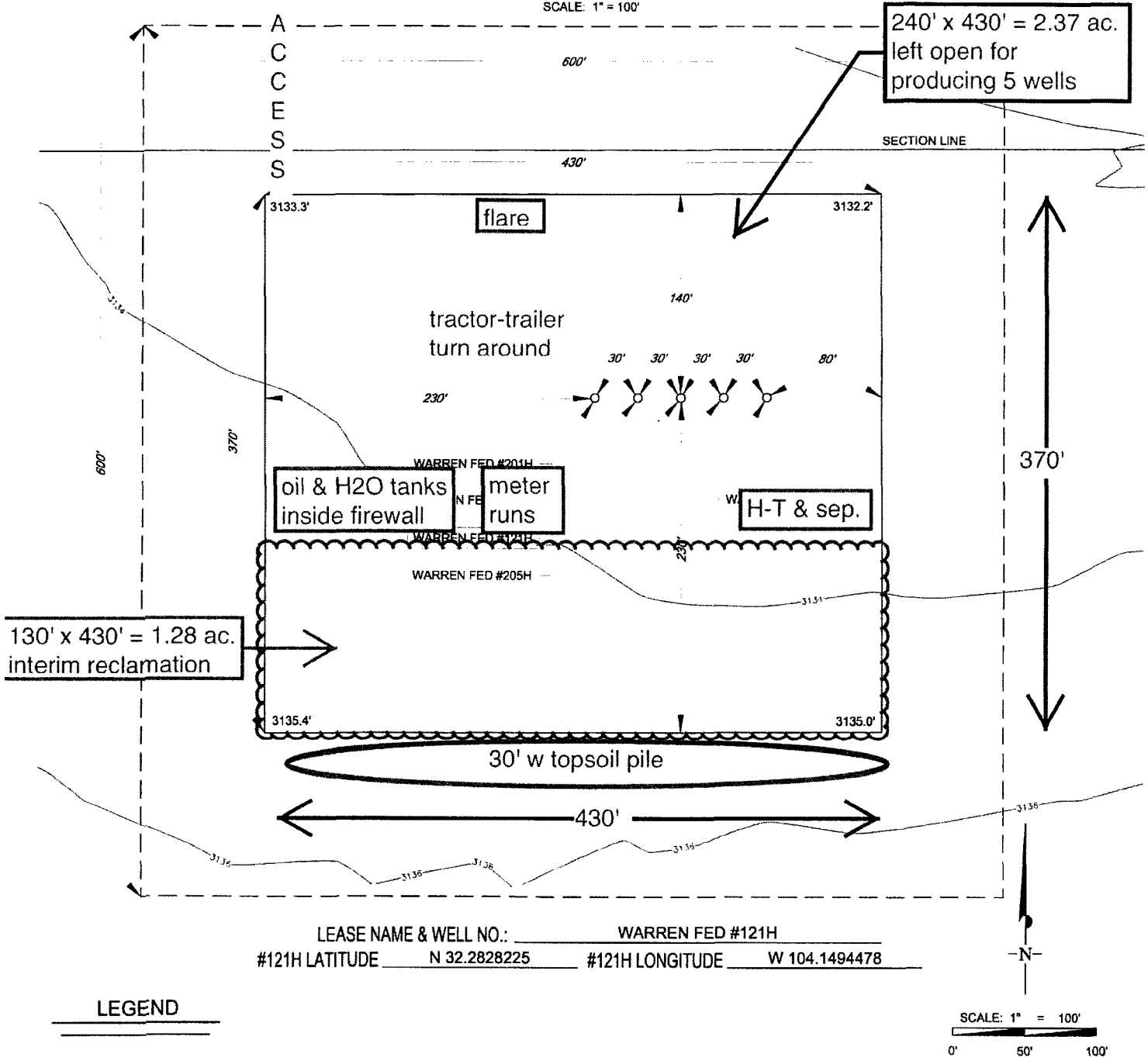
1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7548
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM





SECTION 25, TOWNSHIP 23-S, RANGE 27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

DETAIL VIEW
SCALE: 1" = 100'



INTERIM RECLAMATION & PRODUCTION DIAGRAM

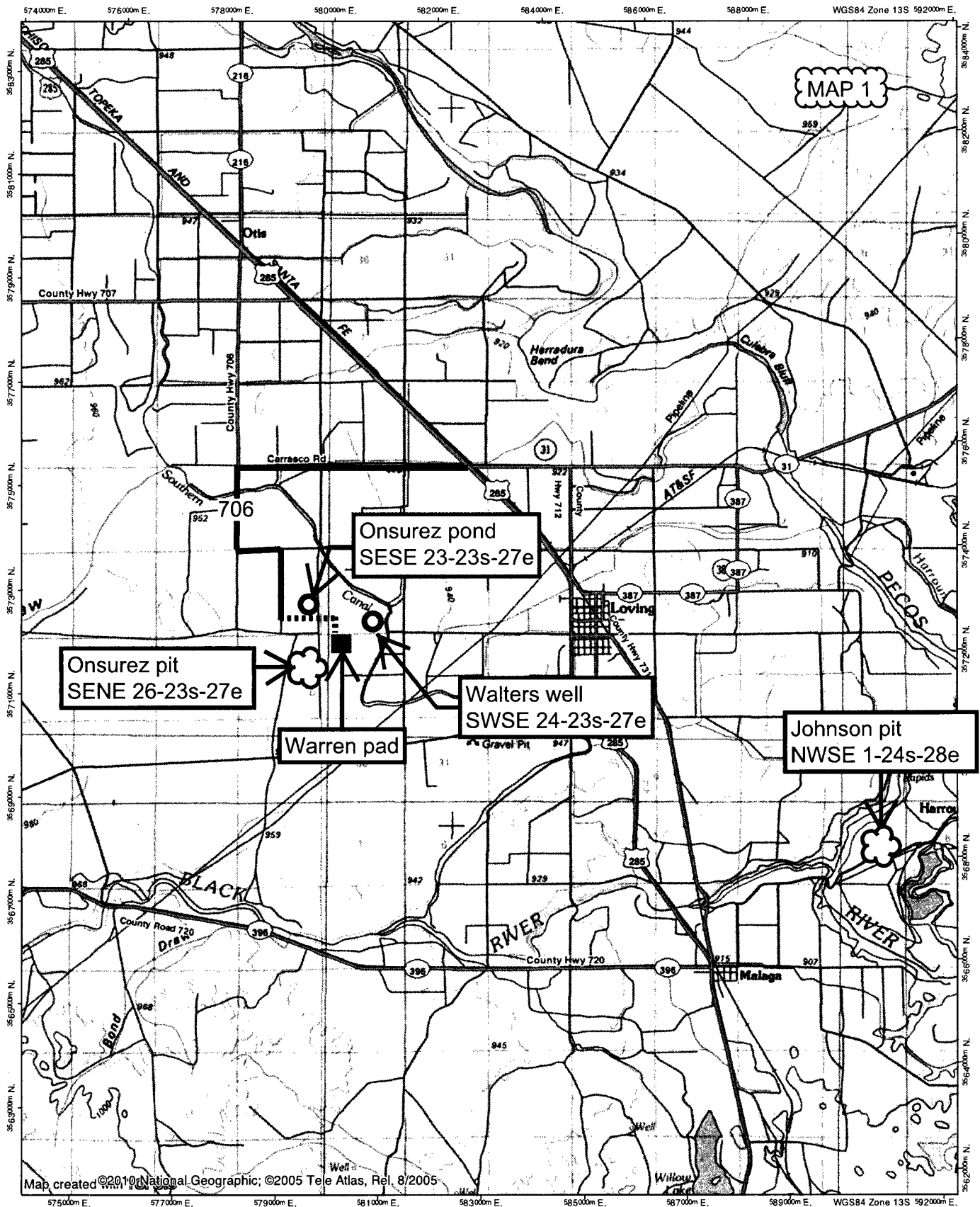
ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE OF THE NORTH AMERICAN DATUM 1927, U.S. SURVEY FEET

THIS PROPOSED PAD SITE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

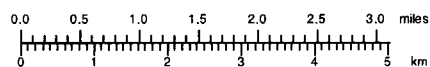


TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7548
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM



**NATIONAL
GEOGRAPHIC**

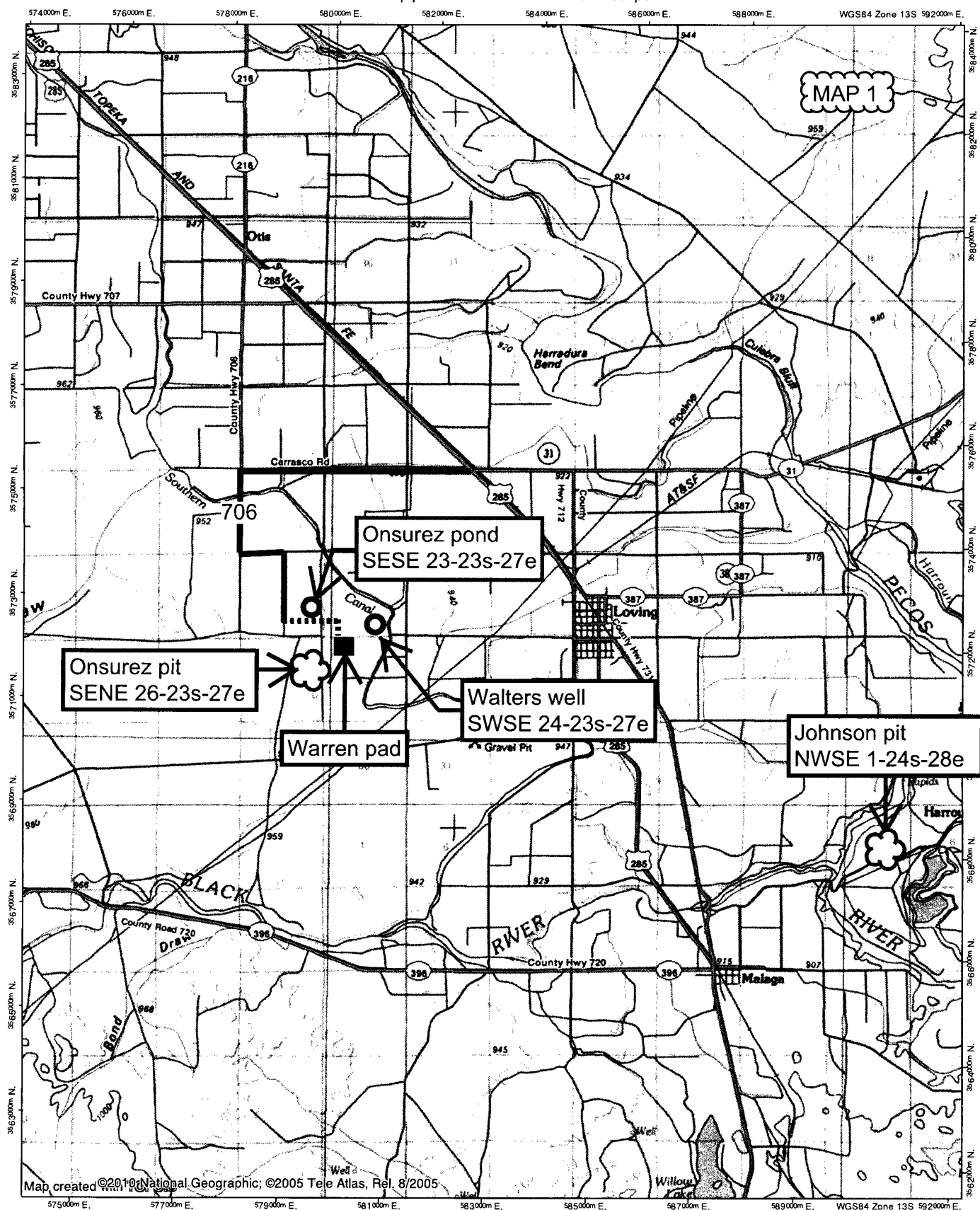


TN MN

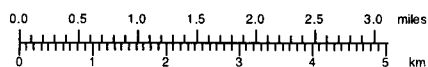
7°

03/16/17

TOPO! map printed on 03/16/17 from "Untitled.topo"



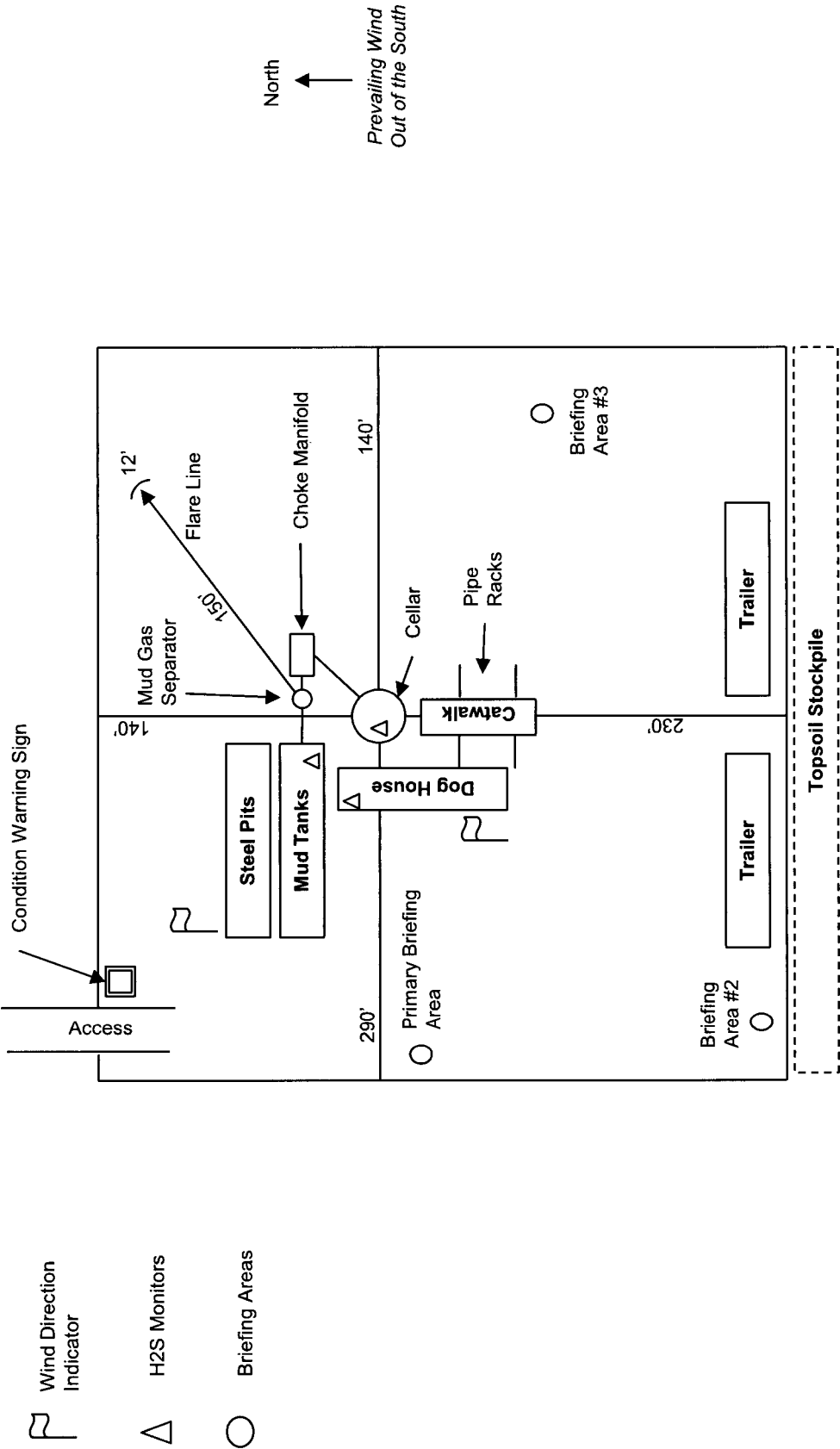
**NATIONAL
GEOGRAPHIC**



TN * MN
7°
03/16/17

Rig Diagram

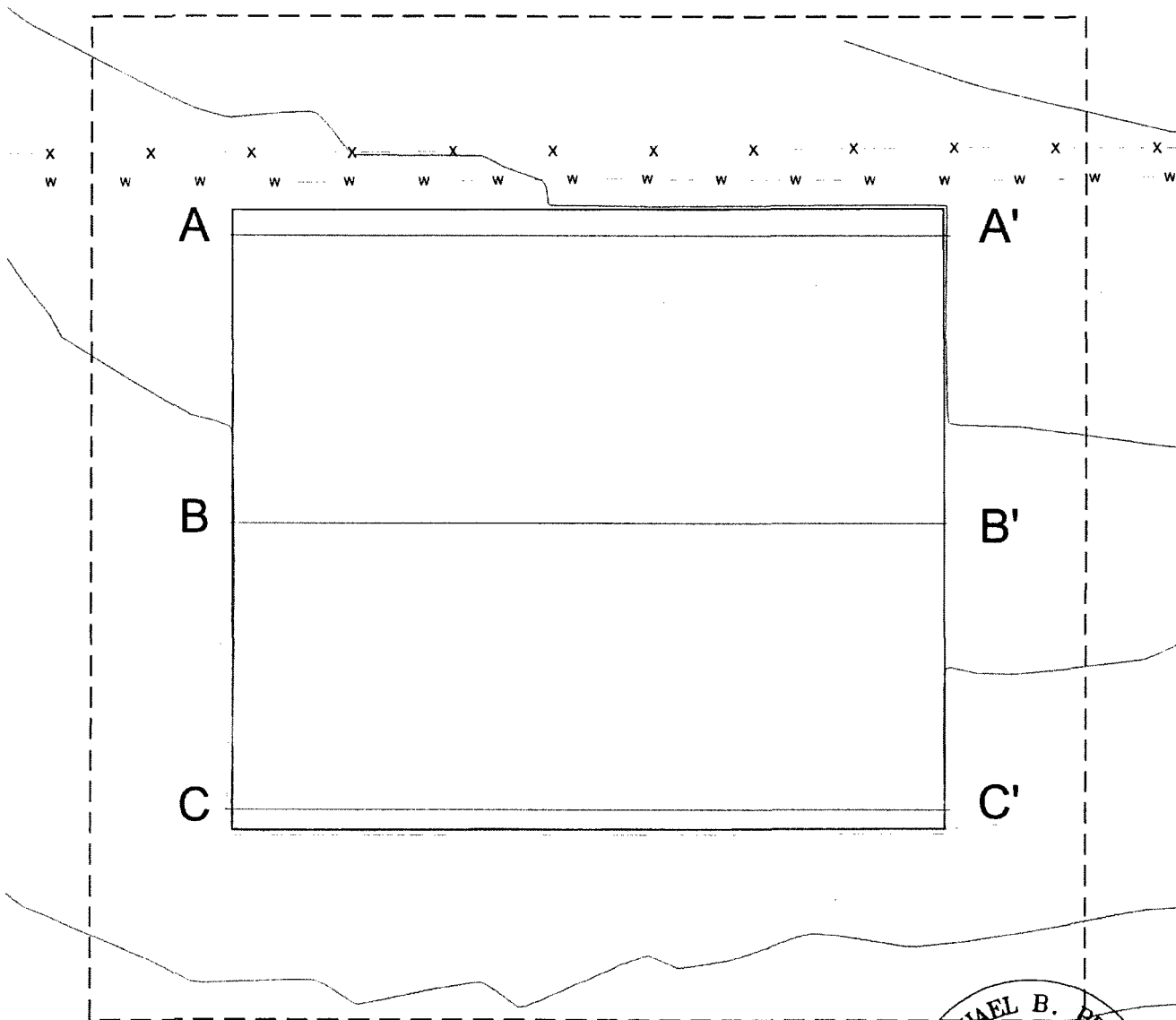
Warren Fed Com 121H
SHL 170' FNL & 770' FWL
25-23S-27E Eddy County, NM



SCALE: 1" = 100'
0' 50' 100'

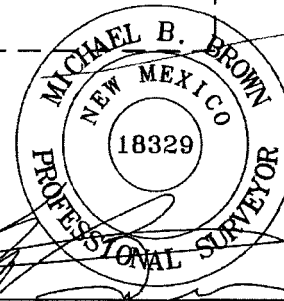
SECTION 25, TOWNSHIP 23-S, RANGE 27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

MAP 6



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

1400 EVERMAN PARKWAY, Ste. 187 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7548
TEXAS FIRM REGISTRATION NO. 10042504
WWW.TOPOGRAPHIC.COM



Michael Blake Brown, P.S. No. 18329

DECEMBER 8, 2016

Field note description of even date accompanies this plat.

WARREN FED #221H SURFACE PAD SITE PROFILE DATE: 05/17/16 FILE: CO:WARREN FED 221H SURFACE PAD SITE PRO REV5 DRAWN BY: S.R.J. SHEET :	REVISION:		NOTES: 1. ORIGINAL DOCUMENT SIZE: 8.5" X 11" 2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1927. 3. CERTIFICATION IS MADE ONLY TO THE LOCATION OF THIS EASEMENT, IN RELATION TO THE EVIDENCE FOUND DURING A FIELD SURVEY. MADE ON THE GROUND, UNDER MY SUPERVISION, AND USING DOCUMENTATION PROVIDED BY MATADOR RESOURCE COMPANY. ONLY UTILITIES/EASEMENTS THAT WERE VISIBLE ON THE DATE OF THIS SURVEY, WITHIN/ADJOINING THIS EASEMENT, HAVE BEEN LOCATED AS SHOWN HEREON OF WHICH I HAVE KNOWLEDGE. THIS CERTIFICATION IS LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE, AND MADE FOR THIS TRANSACTION ONLY.
	A.V.F.	08/08/2016	
	J.S.T.	08/19/2016	
	G.L.H.	11/03/2016	
	E.A.H.	11/07/2016	
	G.J.U.	12/08/2016	

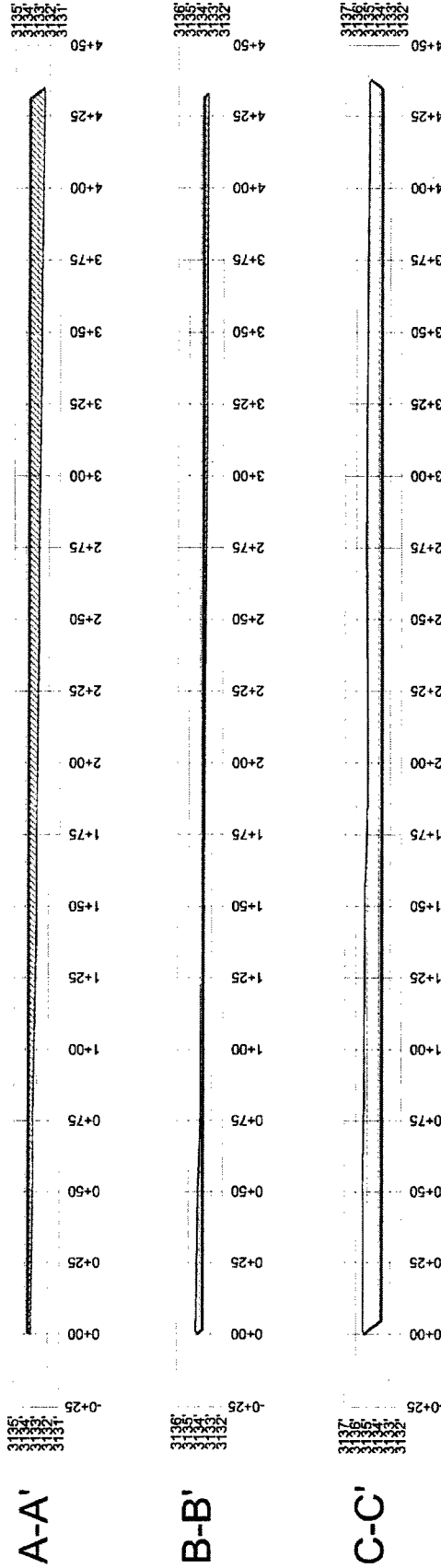
TOP OF PAD ELEVATION:
3133.8033

FILL SLOPE: 33.33% 3.00:1 18.43°
FILL SLOPE: 33.33% 3.00:1 18.43°
BALANCE TOLERANCE (C.Y.): 0.00
CUT SWELL FACTOR: 1.00
FILL SHRINK FACTOR: 1.00

PAD EARTHWORK VOLUMES
CUT : 49,095.1 C.F., 1,818.34 C.Y.
FILL : 49,095.1 C.F., 1,818.34 C.Y.
BALANCE EXPORT: 0.1 C.F., 0.00 C.Y.
AREA: 163655.9 SQ.FT., 3.757 ACRES

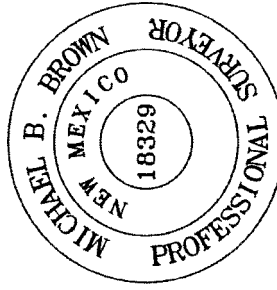


SECTION 25, TOWNSHIP 23-S, RANGE 27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX: (817) 744-7548
TEXAS FIRM REGISTRATION NO. 10042504
WWW.TOPOGRAPHIC.COM

Horizontal Scale = 1:60
Vertical Scale = 1:15



[Signature]

Michael Blake Brown, P.S. No. 18329

DECEMBER 8, 2016

Field note description of even date accompanies this plat.

MAP 7

REVISION:		NOTES: 1. ORIGINAL DOCUMENT SIZE 8.5" X 11" 2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1927. 3. THIS EASEMENT IS GRANTED TO THE LANDOWNERS OF THIS EASEMENT, IN RELATION TO THE SURVEY, WITHIN ADJOINING THIS EASEMENT, HAVE BEEN LOCATED AS SHOWN HEREON OF WHICH I HAVE KNOWLEDGE. THIS CERTIFICATION IS LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE, AND MADE FOR THIS TRANSACTION ONLY.
A.V.F.	08/08/2016	
J.S.T.	08/19/2016	
G.L.H.	11/03/2016	
E.A.H.	11/07/2016	
G.J.U.	12/08/2016	
DATE:	05/17/16	
FILE:	CD WARREN FED 221H SURFACE PAD SITE PROJ	
DRAWN BY:	S.R.J.	
SHEET:		

WARREN FED #221H SURFACE
PAD SITE PROFILE

FILE: CD WARREN FED 221H SURFACE PAD SITE PROJ

DRAWN BY: S.R.J.

DATE: 05/17/16

G.J.U.

E.A.H.

G.L.H.

J.S.T.


A.V.F.

March 17, 2017

To Who it May Concern:

Matador Resources Company has a private surface owner agreement with William Colwell ((575) 826-3384; 241 Colwell Ranch Rd., Carlsbad NM 88220) for the Warren Fed Com 121H well site, pipeline, power line, and road in Section 25, T. 23 S., R. 27 E. Eddy County, NM.

Matador Resources Company has a private surface owner agreement with Antonio Onsurez, Trustee ((575) 706-2280; PO Box 598, Loving NM 88256) for the road, pipeline, and power line in Section 24, T. 23 S., R. 27 E. Eddy County, NM.

A handwritten signature in black ink, appearing to read "B. Wood", with a stylized, cursive script.

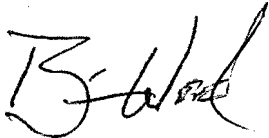
Brian Wood

March 17, 2017

To Who it May Concern:

Matador Resources Company has a private surface owner agreement with William Colwell ((575) 826-3384; 241 Colwell Ranch Rd., Carlsbad NM 88220) for the Warren Fed Com 121H well site, pipeline, power line, and road in Section 25, T. 23 S., R. 27 E. Eddy County, NM.

Matador Resources Company has a private surface owner agreement with Antonio Onsurez, Trustee ((575) 706-2280; PO Box 598, Loving NM 88256) for the road, pipeline, and power line in Section 24, T. 23 S., R. 27 E. Eddy County, NM.

A handwritten signature in black ink, appearing to read "B. Wood", with a stylized, cursive script.

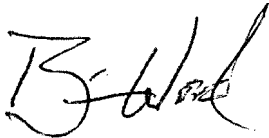
Brian Wood

March 17, 2017

To Who it May Concern:

Matador Resources Company has a private surface owner agreement with William Colwell ((575) 826-3384; 241 Colwell Ranch Rd., Carlsbad NM 88220) for the Warren Fed Com 121H well site, pipeline, power line, and road in Section 25, T. 23 S., R. 27 E. Eddy County, NM.

Matador Resources Company has a private surface owner agreement with Antonio Onsurez, Trustee ((575) 706-2280; PO Box 598, Loving NM 88256) for the road, pipeline, and power line in Section 24, T. 23 S., R. 27 E. Eddy County, NM.

A handwritten signature in black ink, appearing to read "B. Wood". The signature is stylized with a large, looped initial "B" and a cursive "Wood".

Brian Wood

March 17, 2017

To Who it May Concern:

Matador Resources Company has a private surface owner agreement with William Colwell ((575) 826-3384; 241 Colwell Ranch Rd., Carlsbad NM 88220) for the Warren Fed Com 121H well site, pipeline, power line, and road in Section 25, T. 23 S., R. 27 E. Eddy County, NM.

Matador Resources Company has a private surface owner agreement with Antonio Onsurez, Trustee ((575) 706-2280; PO Box 598, Loving NM 88256) for the road, pipeline, and power line in Section 24, T. 23 S., R. 27 E. Eddy County, NM.

A handwritten signature in black ink, appearing to read "B. Wood". The signature is stylized with a large, looped "B" and a cursive "Wood".

Brian Wood

March 17, 2017

To Who it May Concern:

Matador Resources Company has a private surface owner agreement with William Colwell ((575) 826-3384; 241 Colwell Ranch Rd., Carlsbad NM 88220) for the Warren Fed Com 121H well site, pipeline, power line, and road in Section 25, T. 23 S., R. 27 E. Eddy County, NM.

Matador Resources Company has a private surface owner agreement with Antonio Onsurez, Trustee ((575) 706-2280; PO Box 598, Loving NM 88256) for the road, pipeline, and power line in Section 24, T. 23 S., R. 27 E. Eddy County, NM.

A handwritten signature in black ink, appearing to read "B. Wood". The signature is stylized with a large, looped "B" and a cursive "Wood".

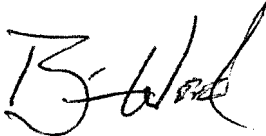
Brian Wood

March 17, 2017

To Who it May Concern:

Matador Resources Company has a private surface owner agreement with William Colwell ((575) 826-3384; 241 Colwell Ranch Rd., Carlsbad NM 88220) for the Warren Fed Com 121H well site, pipeline, power line, and road in Section 25, T. 23 S., R. 27 E. Eddy County, NM.

Matador Resources Company has a private surface owner agreement with Antonio Onsurez, Trustee ((575) 706-2280; PO Box 598, Loving NM 88256) for the road, pipeline, and power line in Section 24, T. 23 S., R. 27 E. Eddy County, NM.

A handwritten signature in black ink, appearing to read "B. Wood". The signature is stylized with a large, looped "B" and a cursive "Wood".

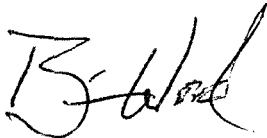
Brian Wood

March 17, 2017

To Who it May Concern:

Matador Resources Company has a private surface owner agreement with William Colwell ((575) 826-3384; 241 Colwell Ranch Rd., Carlsbad NM 88220) for the Warren Fed Com 121H well site, pipeline, power line, and road in Section 25, T. 23 S., R. 27 E. Eddy County, NM.

Matador Resources Company has a private surface owner agreement with Antonio Onsurez, Trustee ((575) 706-2280; PO Box 598, Loving NM 88256) for the road, pipeline, and power line in Section 24, T. 23 S., R. 27 E. Eddy County, NM.

A handwritten signature in black ink, appearing to read 'B. Wood', with a stylized flourish at the end.

Brian Wood

**Matador Production Company
Warren Fed Com 121H
SHL 170' FNL & 770' FWL Sec. 25
BHL 240' FSL & 660' FWL Sec. 25
T. 23 S., R. 27 E., Eddy County, NM**

SURFACE PLAN PAGE 1

Surface Use Plan

1. ROAD DIRECTIONS & DESCRIPTIONS (See MAPS 1 – 5)

From the gas stations in Loving, NM...

Go NW 2-1/4 miles on US 285

Then turn left and go W 2-3/4 miles on Carrasco Road

Then turn left and go S 1.0 mile on County Road 706

Then turn left and go E 0.6 mile on County Road 728

Then turn right and go S 0.85 mile on South Country Road

Then turn left and go E 1/2 mile on an existing Onsurez private road

Then turn right and go S 1/10 mile onto a central production facility (CPF)

Then veer right off the CPF and go S ≈400' cross-country to the Warren pad

Non-county roads will be maintained as needed to Gold Book standards. This includes pulling ditches, preserving the crown, and cleaning culverts. This will be done at least once a year, and more often as needed. Caliche will be hauled from existing pits on private land (Onsurez pit in SENE 26-23s-27e or Johnson pit in NWSE 1-24s-28e).

2. ROAD TO BE BUILT OR UPGRADED (See MAPS 2 - 5)

Four hundred feet of new road will be built. The new road will be crowned and ditched, have a 14' wide driving surface, and be surfaced with caliche. A cattle guard will be installed in the fence north of the pad. Maximum disturbed width = 30'. Maximum grade = 1%. Maximum cut or fill = 1'. No upgrade, culvert, or vehicle turn out is needed.

3. EXISTING WELLS (See MAP 2)

Existing oil, gas, water, disposal, and P & A wells are within a mile. No injection well is within a mile.

4. PROPOSED PRODUCTION FACILITIES (see MAPS 3 & 4)

**Matador Production Company
Warren Fed Com 121H
SHL 170' FNL & 770' FWL Sec. 25
BHL 240' FSL & 660' FWL Sec. 25
T. 23 S., R. 27 E., Eddy County, NM**

SURFACE PLAN PAGE 2

Facilities will be built on the south side of the pad (see Interim Reclamation & Production Diagram). Six hundred twenty-five feet of buried gas pipeline and 625' of overhead raptor safe 3-phase power line will be built north to tie into the CPF lines. Pipeline (1/well) will be 3" O. D., carbon steel, Schedule 80 x 52. Operating pressure will be ≤ 1200 psi.

5. WATER SUPPLY (See MAPS 1 – 4)

Water will be surface pipelined from the existing Onsurez frac pond (SESE 23-23s-27e) or existing Walters well (SWSE 24-23s-27e)

6. CONSTRUCTION MATERIALS & METHODS (see MAP 5)

NM One Call (811) will be notified before construction starts. There is a buried water line north of the pad and south of the fence. Top ≈ 6 " of soil and brush will be stockpiled south of the pad. Pipe racks will be to the south. A closed loop drilling system will be used. Caliche will be hauled from existing pits on private land (Onsurez pit in SENE 26-23s-27e or Johnson pit in NWSE 1-24s-28e).

7. WASTE DISPOSAL

All trash will be placed in a portable trash cage. It will be hauled to the Eddy County landfill. There will be no trash burning. Contents (drill cuttings, mud, salts, and other chemicals) of the mud tanks will be hauled to R360's state approved (NM1-6-0) disposal site at Halfway. Human waste will be disposed of in chemical toilets and hauled to the Carlsbad wastewater treatment plant.

8. ANCILLARY FACILITIES

There will be no airstrip or camp. Camper trailers will be on location for the company man, tool pusher, or mud logger.

9. WELL SITE LAYOUT

**Matador Production Company
Warren Fed Com 121H
SHL 170' FNL & 770' FWL Sec. 25
BHL 240' FSL & 660' FWL Sec. 25
T. 23 S., R. 27 E., Eddy County, NM**

SURFACE PLAN PAGE 3

See Rig Diagram for depictions of the well pad, trash cage, access onto the location, parking, living facilities, and rig orientation.

10. RECLAMATION

Interim reclamation will shrink the pad $\approx 35\%$ by removing caliche and reclaiming the south side (130' x 430'), leaving 2.37 acres for 5 wells, truck turn around, and production equipment. Disturbed areas will be contoured to match pre-construction grades. Soil and brush will be evenly spread over disturbed areas. Disturbed areas will be seeded in accordance with BLM requirements. Enough stockpiled topsoil will be retained to cover the remainder of the pad when the wells are plugged. Once the last well is plugged, then the remainder of the pad and new road will be similarly reclaimed. Noxious weeds will be controlled.

11. SURFACE OWNER

All construction will be on private land. Matador has a private surface owner agreement with William Colwell ((575) 826-3384; 241 Colwell Ranch Rd., Carlsbad NM 88220) for the well site and part of the pipeline, power line, and road. Matador has a private surface owner agreement with Antonio Onsurez, Trustee ((575) 706-2280; PO Box 598, Loving NM 88256) for the remainder of the road, pipeline, and power line.

Land use: 625' x 45' pipeline & power line corridor = 0.65 acres
 400' x 30' road = 0.28 acres
 + 370' x 430' pad = 3.65 acres
 4.58 acres short term
 - 1.28 acres interim reclamation on pad
 - 0.43 acres reclaimed pipeline (all)
 2.87 acres long term

12. OTHER INFORMATION

On site inspection was held with Vance Wolf (BLM) on November 29, 2016.

Lone Mountain will inspect and file a report.

**Matador Production Company
Warren Fed Com 121H
SHL 170' FNL & 770' FWL Sec. 25
BHL 240' FSL & 660' FWL Sec. 25
T. 23 S., R. 27 E., Eddy County, NM**

SURFACE PLAN PAGE 4

CERTIFICATION

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U. S. C. 1001 for the filing of false statements. Executed this 17th day of March, 2017.

Brian Wood, Consultant
Permits West, Inc.
37 Verano Loop, Santa Fe, NM 87508
(505) 466-8120 FAX: (505) 466-9682

Cellular: (505) 699-2276

Field representative will be:
Sam Pryor, Senior Staff Landman
Matador Production Company
5400 LBJ Freeway, Suite 1500

**Matador Production Company
Warren Fed Com 121H
SHL 170' FNL & 770' FWL Sec. 25
BHL 240' FSL & 660' FWL Sec. 25
T. 23 S., R. 27 E., Eddy County, NM**

SURFACE PLAN PAGE 5

Dallas TX 75240
Phone: (972) 371-5241
FAX: (214) 866-4841



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

PWD Data Report

12/21/2017

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? NO

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:

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? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

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?

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? NO

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? NO

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? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Other PWD discharge volume (bbl/day):

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

12/21/2017

Bond Information

Federal/Indian APD: FED

BLM Bond number: NMB001079

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: