Form 3160-3 (June 2015)

| FORM APPROVED |
|--------------------------|
| OMB No. 1004-0137 |
| Expires: January 31, 201 |

| UNITED STATES |
|----------------------------|
| DEPARTMENT OF THE INTERIOR |
| DUDEALLOE LAND MANACEMENT |

| NMNM012559 | |
|------------|--|
| | |

5. Lease Serial No.

| BOILETTO OF EITH BINET | TIOLI | VILLI VI | | | | |
|---|----------|---|---------------------|--|---------------|-----------------|
| APPLICATION FOR PERMIT TO | DRILL | OR REENTER | | 6. If Indian, Allotee | or Tribe N | lame |
| | REENT | ER | | 7. If Unit or CA Agr | reement, N | ame and No. |
| 1b. Type of Well: Oil Well Gas Well | Other | | | 8. Lease Name and | Well No. | |
| 1c. Type of Completion: Hydraulic Fracturing | Single Z | one Multiple Zone | | TATER SALAD FE | DERAL O | MOS |
| 2. Name of Operator | | | | 9. API Well No. 30 | 0015 4774 | 0 |
| COG OPERATING LLC | | | | 30 | 0013 4774 | 7 |
| 3a. Address 600 West Illinois Ave, Midland, TX 79701 | | Phone No. <i>(include area code</i>) 683-7443 | ?) | 10. Field and Pool, of PURPLE SAGE/W | | tory |
| 4. Location of Well (Report location clearly and in accordance At surface NENE / 225 FNL / 1090 FEL / LAT 32.034 | | • | | 11. Sec., T. R. M. or SEC 24/T26S/R28 | | Survey or Are |
| At proposed prod. zone NENE / 200 FNL / 1310 FEL / | | | 375 | | | |
| 14. Distance in miles and direction from nearest town or post o 15 miles | ffice* | | | 12. County or Parisl EDDY | | 13. State NM |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) | 16. N | | 17. Spacin 640.0 | ng Unit dedicated to t | his well | |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 30 feet | | Proposed Depth 90 feet / 21016 feet | | BIA Bond No. in file | | |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 2913 feet | | Approximate date work will s | start* | 23. Estimated duration 30 days | ion | |
| | 24. | Attachments | | | | |
| The following, completed in accordance with the requirements (as applicable) | of Onsh | ore Oil and Gas Order No. 1 | , and the H | Iydraulic Fracturing r | ule per 43 | CFR 3162.3- |
| Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest Syst SUPO must be filed with the appropriate Forest Service Office | | Item 20 above). ds, the 5. Operator certification | ation. | s unless covered by an mation and/or plans as | | ` |
| 25. Signature (Electronic Submission) | | Name (Printed/Typed) MAYTE REYES / Ph: (43) | 32) 683-7 | 443 | Date 06/08/20 |)20 |
| Title | | | | | | |

| 25. Signature | Name (Frintea/Typea) | Date |
|--|----------------------------------|------------|
| (Electronic Submission) | MAYTE REYES / Ph: (432) 683-7443 | 06/08/2020 |
| Title | | |
| Regulatory Analyst | | |
| Approved by (Signature) | Name (Printed/Typed) | Date |
| (Electronic Submission) | Cody Layton / Ph: (575) 234-5959 | 10/21/2020 |
| Title | Office | |
| Assistant Field Manager Lands & Minerals | Carlsbad Field Office | |

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Approval Date: 10/21/2020

Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.

Will require a directional survey with the C-104

SL

IPPROVED WITH CONDITIONS

Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string

KP 12/1/2020 GEO Review

*(Instructions on page 2)

(Continued on page 2)

DISTRICT I 1625 N. FRENCH DR., HOBBS, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720

State of New Mexico Energy, Minerals & Natural Resources Department

CONSERVATION DIVISION

DISTRICT II 811 S. FIRST ST., ARTESIA, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

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

□ AMENDED REPORT

DISTRICT III 1000 RIO BRAZOS RD., AZTEC, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV 1220 S. ST. FRANCIS DR., SANTA FE, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

WELL LOCATION AND ACREAGE DEDICATION PLAT API Number Pool Code Pool Name 98220 Purple Sage; Wolfcamp, 30-015 47749 Property Code Well Number Property Name TATER SALAD FEDERAL COM 902H 329866 OGRID No. Operator Name Elevation 229137 COG OPERATING, LLC 2913.0'

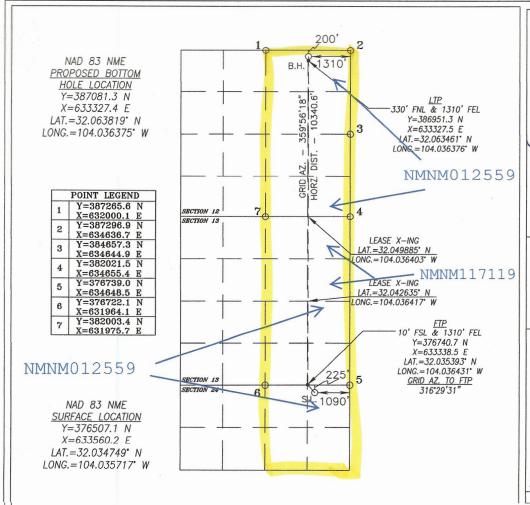
Surface Location

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| Α | 24 | 26-S | 28-E | | 225 | NORTH | 1090 | EAST | EDDY |

Bottom Hole Location If Different From Surface

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|-----------------|---------|----------|---------------|---------|---------------|------------------|---------------|----------------|--------|
| Α | 12 | 26-5 | 28-E | | 200 | NORTH | 1310 | EAST | EDDY |
| Dedicated Acres | Joint o | r Infill | Consolidation | Code Or | der No. | | | | |
| 610 | | | | l | | | | | |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

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

le-2-20 1110 Signature D Date Mayte Reyes

Printed Name

mreves1@concho.com

E-mail Address

SURVEYOR CERTIFICATION

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

APRIL 13, 2020

Date of Survey

Signature & Seal of Professional Surveyor



Certificate No. CHAD HARCROW

W.O. # 20-586

DRAWN BY: DS

17777

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

□ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | WELL BOOKITON AND | HORDAGE DEDICATION I BALL | |
|---|---------------|-------------------|---------------------------|---------|
| | API Number | Pool Code | Pool Name | |
| | 30-015 | 98220 | Purple Sage; Wolfca | mp, Gas |
| Ī | Property Code | Well Number | | |
| | | TATER SALAI | 902H | |
| Ī | OGRID No. | 0pera | Elevation | |
| | 229137 | COG OPE | RATING, LLC | 2913.0' |

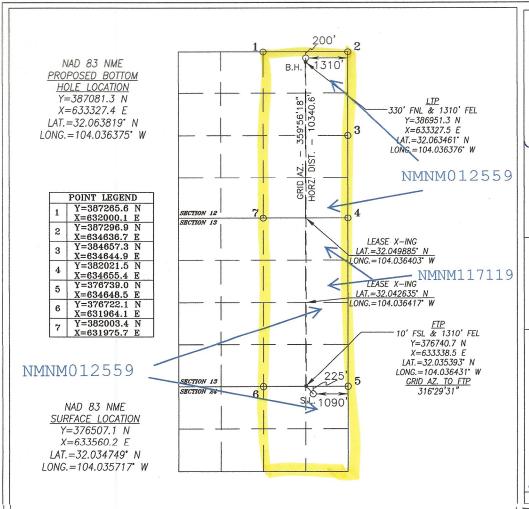
Surface Location

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| Α | 24 | 26-S | 28-E | | 225 | NORTH | 1090 | EAST | EDDY |

Bottom Hole Location If Different From Surface

| UL or lot No. | Section | Townshi | p Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|----------------|-----------|----------|---------------|---------|---------------|------------------|---------------|----------------|--------|
| A | 12 | 26-9 | S 28-E | | 200 | NORTH | 1310 | EAST | EDDY |
| Dedicated Acre | s Joint o | r Infill | Consolidation | Code Or | der No. | | | | |
| 610 | | | | | | | | | |

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(a Signature D Mayte Reyes

Date

6-2-20

Printed Name

mreyes1@concho.com

E-mail Address

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APRIL 13, 2020

Date of Survey

Signature & Seal of Professional Surveyor



W.O. # 20-586

DRAWN BY: DS

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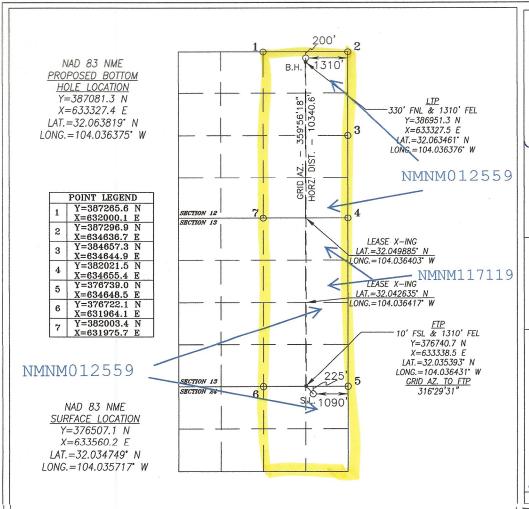
Surface Location

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| A | 12 | 26-9 | S 28-E | | 200 | NORTH | 1310 | EAST | EDDY |
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(a Signature D Mayte Reyes

Date

6-2-20

Printed Name

mreyes1@concho.com

E-mail Address

SURVEYOR CERTIFICATION

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

APRIL 13, 2020

Date of Survey

Signature & Seal of Professional Surveyor



W.O. # 20-586

DRAWN BY: DS

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: COG Operating, LLC LEASE NO.: NMNM-012559

WELL NAME & NO.: Tater Salad Federal Com 902H

SURFACE HOLE FOOTAGE: 0225' FNL & 1090' FEL

BOTTOM HOLE FOOTAGE | 0200' FNL & 1310' FEL Sec. 12, T.26 S., R.28 E.

LOCATION: | Section 24, T.26 S., R.28 E., NMPM

COUNTY: | **Eddy County, New Mexico**

COA

| H2S | C Yes | © No | |
|----------------------|--------------------------------|------------------|--------------|
| Potash | None | Secretary | © R-111-P |
| Cave/Karst Potential | C Low | • Medium | C High |
| Cave/Karst Potential | Critical | | |
| Variance | © None | • Flex Hose | Other |
| Wellhead | Conventional | © Multibowl | C Both |
| Other | □4 String Area | ☐ Capitan Reef | □WIPP |
| Other | ☐ Fluid Filled | ☐ Cement Squeeze | ☐ Pilot Hole |
| Special Requirements | ☐ Water Disposal | ☑ COM | □ Unit |

Medium Cave/Karst

Possibility of water flows in the Salado and Castile.

Possibility of lost circulation in the Rustler, Salado, and Delaware.

A. HYDROGEN SULFIDE

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

B. CASING

- 1. The **10-3/4** inch surface casing shall be set at approximately **250** feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8** hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the **7-5/8** 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 **3000** (**3M**) psi.
- 3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be **5000** (**5M**) psi.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, 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.

Page 3 of 7

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)
 - Eddy County
 Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
- 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 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. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. 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.
- 4. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 5. 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.
- 6. 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.

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: The flex line must meet the requirements of API 16C. 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.
- 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. 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).

- c. 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.
- d. The results of the test shall be reported to the appropriate BLM office.
- e. 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.
- f. 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.
- g. 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.

JAM 10132020



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

Drilling Plan Data Report

10/22/2020

APD ID: 10400057712

Submission Date: 06/08/2020

Highlighted data reflects the most recent changes

Operator Name: COG OPERATING LLC

Well Name: TATER SALAD FEDERAL COM

Well Number: 902H

Show Final Text

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Geologic Formations

| | | | T \ /ti 1 | NA | | | Dun dundin n |
|--------------|------------------|-----------|------------------------|-------|-------------|-------------------|---------------------|
| Formation ID | Formation Name | Elevation | True Vertical Depth | Depth | Lithologies | Mineral Resources | Producing Formation |
| 751334 | | 2913 | 0 | 0 | ALLUVIUM | NONE | N |
| 751338 | RUSTLER | 2453 | 460 | 460 | ALLUVIUM | NONE | N |
| 751339 | TOP SALT | 2323 | 590 | 590 | SALT | NONE | N |
| 751340 | BASE OF SALT | 448 | 2465 | 2465 | ANHYDRITE | NONE | N |
| 751345 | LAMAR | 248 | 2665 | 2665 | LIMESTONE | NONE | N |
| 751346 | BELL CANYON | 213 | 2700 | 2700 | LIMESTONE | NONE | N |
| 751341 | CHERRY CANYON | -627 | 3540 | 3540 | SANDSTONE | NATURAL GAS, OIL | N |
| 751347 | BRUSHY CANYON | -1877 | 4790 | 4790 | SANDSTONE | NATURAL GAS, OIL | N |
| 751342 | BONE SPRING LIME | -3452 | 6365 | 6365 | SHALE | NATURAL GAS, OIL | N |
| 751343 | BONE SPRING 1ST | -4377 | 7290 | 7290 | SANDSTONE | NATURAL GAS, OIL | N |
| 751337 | BONE SPRING 3RD | -6202 | 9115 | 9115 | SANDSTONE | NATURAL GAS, OIL | N |
| 751348 | WOLFCAMP | -6477 | 9390 | 9390 | SILTSTONE | NATURAL GAS, OIL | N |
| 751349 | WOLFCAMP | -6977 | 9890 | 9890 | SILTSTONE | NATURAL GAS, OIL | N |
| 751351 | WOLFCAMP | -7302 | 10215 | 10215 | SILTSTONE | NATURAL GAS, OIL | N |
| 751352 | WOLFCAMP | -7602 | 10515 | 10515 | SILTSTONE | NATURAL GAS, OIL | Y |

Section 2 - Blowout Prevention

Well Name: TATER SALAD FEDERAL COM Well Number: 902H

Pressure Rating (PSI): 3M Rating Depth: 9600

Equipment: Annular. The BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and

choke manifold.

Requesting Variance? NO

Variance request: A variance is requested for the use of a flexible choke line from the BOP to choke manifold. See attached for specs and hydrostatic test chart.

Testing Procedure: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all of the components installed will be functional and tested.

Choke Diagram Attachment:

COG Tater Salad 902H 3M Choke 20200608065049.pdf

BOP Diagram Attachment:

COG_Tater_Salad_902H_3M_BOP_20200608065058.pdf

COG Tater Salad 902H Flex Hose 20200608065107.pdf

Pressure Rating (PSI): 5M Rating Depth: 10390

Equipment: Annular. The BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold.

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to choke manifold. See attached for specs and hydrostatic test chart.

Testing Procedure: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all of the components installed will be functional and tested.

Choke Diagram Attachment:

COG__Tater_Salad_902H_5M_Choke_20200608065142.pdf

BOP Diagram Attachment:

COG_Tater_Salad_902H_5M_BOP_20200608065149.pdf

COG_Tater_Salad_902H_Flex_Hose_20200608065159.pdf

Well Name: TATER SALAD FEDERAL COM Well Number: 902H

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 | 14.7 5 | 10.75 | NEW | API | N | 0 | 575 | 0 | 575 | 2913 | 2338 | 575 | J-55 | 45.5 | ST&C | 8.13 | 16.0 1 | DRY | 18.8 4 | DRY | 18.8 4 |
| 2 | INTERMED IATE | 9.87 5 | 7.625 | NEW | API | N | 0 | 9600 | 0 | 9400 | -6907 | -6487 | 9600 | HCL -80 | | OTHER - BTC | 1.85 | 1.37 | DRY | 2.53 | DRY | 2.53 |
| 3 | PRODUCTI ON | 6.75 | 5.5 | NEW | API | Υ | 0 | 21016 | 0 | 10390 | -6907 | -7477 | 21016 | P- 110 | 23 | OTHER - SF | 2.24 | 2.67 | DRY | 2.97 | DRY | 2.97 |

Casing Attachments

Casing ID: 1 String Type: SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

COG_Tater_Salad_902H_Casing_Prog_20200608065322.pdf

Well Name: TATER SALAD FEDERAL COM Well Number: 902H

Casing Attachments

Casing ID: 2 String Type: INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

COG_Tater_Salad_902H_Casing_Prog_20200608065418.pdf

Casing ID: 3 String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

COG_Tater_Salad_902H_Casing_Prog_20200608065553.pdf

Casing Design Assumptions and Worksheet(s):

COG_Tater_Salad_902H_Casing_Prog_20200608065628.pdf

Section 4 - Cement

| String Type | Lead/Tail | Stage Tool Depth | Top MD | Bottom MD | Quantity(sx) | Yield | Density | Cu Ft | Excess% | Cement type | Additives |
|--------------|-----------|---------------------|--------|-----------|--------------|-------|---------|-------|---------|--------------------------|--------------|
| SURFACE | Lead | 1 | 0 | 575 | 160 | 1.75 | 13.5 | 280 | 50 | Class C | 4% Gel |
| SURFACE | Tail | | 0 | 575 | 250 | 1.34 | 14.8 | 335 | 50 | С | 2% CaCl2 |
| INTERMEDIATE | Lead | 1 | 0 | 9600 | 1400 | 2.8 | 11 | 3920 | 50 | NeoCem | No additives |
| INTERMEDIATE | Tail | | 0 | 9600 | 300 | 1.1 | 16.4 | 330 | 50 | Class H | No additives |
| PRODUCTION | Lead | 1 | 9100 | 2101 6 | 750 | 2 | 12.7 | 1500 | 35 | Lead: 35:65:6 H Blend | No additives |

Well Name: TATER SALAD FEDERAL COM Well Number: 902H

| String Type | Lead/Tail | Stage Tool Depth | Тор МБ | Bottom MD | Quantity(sx) | Yield | Density | Cu Ft | Excess% | Cement type | Additives |
|-------------|-----------|---------------------|--------|-----------|--------------|-------|---------|-------|---------|--------------------------------|--------------|
| PRODUCTION | Tail | | 9100 | 2101 6 | 1200 | 1.24 | 14.4 | 1488 | 35 | Tail: 50:50:2 Class H Blend | No additives |

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: Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times

Describe the mud monitoring system utilized: PVT/Pason/Visual Monitoring

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) | Hd | Viscosity (CP) | Salinity (ppm) | Filtration (cc) | Additional Characteristics |
|-----------|--------------|----------------------------------|----------------------|----------------------|---------------------|-----------------------------|----|----------------|----------------|-----------------|----------------------------|
| 575 | 9600 | OTHER : Brine Diesel Emulsion | 8.6 | 9.4 | | | | | | | Brine Diesel Emulsion |
| 9600 | 2101 6 | OIL-BASED MUD | 10.5 | 12 | | | | | | | ОВМ |
| 0 | 575 | OTHER : Fresh water gel | 8.4 | 8.6 | | | | | | | |

Well Name: TATER SALAD FEDERAL COM Well Number: 902H

Section 6 - Test, Logging, Coring

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

None planned

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

COMPENSATED NEUTRON LOG, GAMMA RAY LOG,

Coring operation description for the well:

None planned

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 6485 Anticipated Surface Pressure: 4187

Anticipated Bottom Hole Temperature(F): 160

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

COG_Tater_Salad_902H_H2S_Schem_20200608065931.pdf COG_Tater_Salad_902H_H2S_SUP_20200608065937.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

COG_Tater_Salad_902H_AC_RPT_20200608070232.pdf

COG_Tater_Salad_902H_Directional_Plan_20200608070241.pdf

Other proposed operations facets description:

Drilling Program.

Cement Program.

GCP.

Other proposed operations facets attachment:

COG_Tater_Salad_902H_Drilling_Prog_20200608070204.pdf

COG_Tater_Salad_902H_GCP_20200608070218.pdf

COG_Tater_Salad_902H_Cement_Prog_20200608070225.pdf

5.500_23.00__0.415__P110_RY_USS_TALON_HTQ_RD5.900_Data_Sheet_07_21_2020_20200930140406.pdf

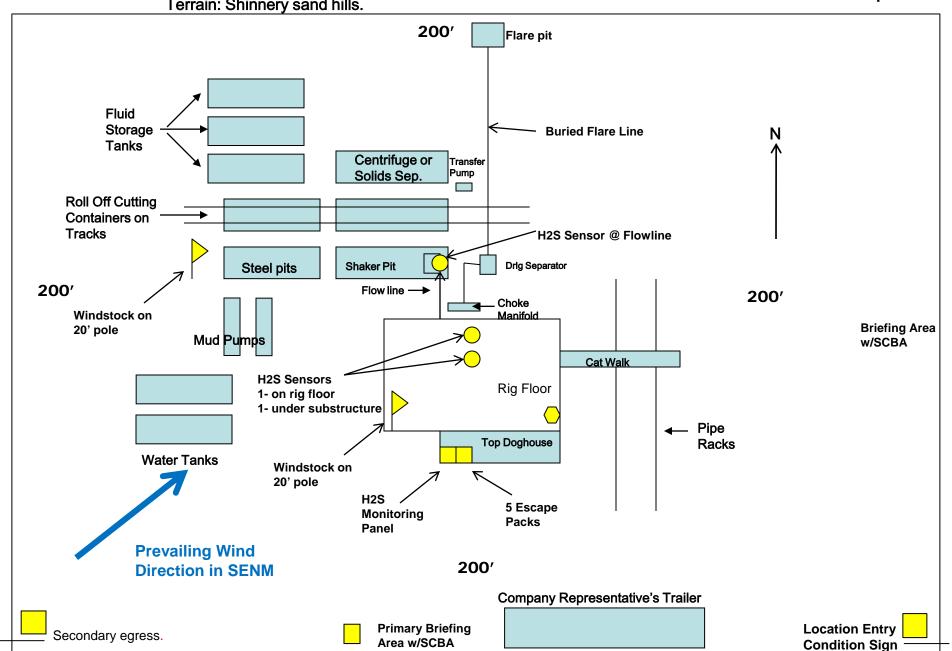
Other Variance attachment:

Casing Program

| Hole Size | Casin | g Interval | Csg. Siz | 70 | Weight | Grade | Conn. | SF | SF Burst | SF |
|-----------|-------|------------|----------|-----|----------|----------|----------|----------|----------|--------------------|
| Hole Size | From | То | Csy. 312 | 26 | (lbs) | Graue | Collii. | Collapse | or burst | Tension |
| 14.75 | 0 | 575 | 10.75 | | 45.5 | J55 | STC | 8.13 | 16.01 | 18.84 |
| 9.875 | 0 | 9600 | 7.625 | | 29.7 | HCL80 | втс | 1.85 | 1.37 | 2.53 |
| 6.75 | 0 | 9400 | 5.5" | | 23 | P110 | BTC | 2.36 | 2.67 | 3.05 |
| 6.75 | 9400 | 21,016 | 5.5" | | 23 | P110 | SF | 2.24 | 2.67 | 2.97 |
| | | | | BLN | M Minimu | m Safety | / Factor | 1.125 | 1 | 1.6 Dry 1.8 Wet |

Intermediate casing will be kept at least 1/3 full while running casing.to mitigate collapse. Intermediate burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface. All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Well pad will be 400' x 400' with cellar in center of pad



COG OPERATING LLC HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. HYDROGEN SULFIDE TRAINING

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

- a. The hazards and characteristics of hydrogen sulfide (H₂S).
- b. The proper use and maintenance of personal protective equipment and life support systems.
- c. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- d. The proper techniques for first aid and rescue procedures.

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

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

There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

2. <u>H₂S SAFETY EQUIPMENT AND SYSTEMS</u>

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H2S. If H2S greater than 100 ppm is encountered in the gas stream we will shut in and install H2S equipment.

a. Well Control Equipment:

Flare line.

Choke manifold with remotely operated choke.

Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.

Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.

- Protective equipment for essential personnel:
 Mark II Surviveair 30-minute units located in the dog house and at briefing areas.
- c. H2S detection and monitoring equipment:
 2 portable H2S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 ppm are reached.
- d. Visual warning systems: Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.
- e. Mud Program:
 The mud program has been designed to minimize the volume of H2S circulated to the surface.
- f. Metallurgy:
 All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
- g. Communication:Company vehicles equipped with cellular telephone.

COG OPERATING LLC has conducted a review to determine if an H2S contingency plan is required for the above referenced well. We were able to conclude that any potential hazardous volume would be minimal. H2S concentrations of wells in this area from surface to TD are low enough; therefore, we do not believe that an H2S contingency plan is necessary.

WARNING

YOU ARE ENTERING AN H₂S AREA AUTHORIZED PERSONNEL ONLY

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

COG OPERATING LLC

1-575-748-6940

EMERGENCY CALL LIST

| | <u>OFFICE</u> | <u>MOBILE</u> |
|--------------------------|---------------|---------------|
| COG OPERATING LLC OFFICE | 575-748-6940 | |
| SETH WILD | 432-683-7443 | 432-528-3633 |
| WALTER ROYE | 575-748-6940 | 432-934-1886 |

EMERGENCY RESPONSE NUMBERS

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

DELAWARE BASIN WEST

ATLAS PROSPECT (NM-E)
TATER SALAD & MOMBA FED (ATLAS 2628)
TATER SALAD FED COM 902H

OWB

Plan: PWP1

Standard Survey Report

19 May, 2020

Survey Report

Company: DELAWARE BASIN WEST
Project: ATLAS PROSPECT (NM-E)

Site: TATER SALAD & MOMBA FED (ATLAS 2628)

Well: TATER SALAD FED COM 902H

Wellbore: OWB

Design: PWP1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well TATER SALAD FED COM 902H

KB=27' @ 2940.0usft (Nabors 893) KB=27' @ 2940.0usft (Nabors 893)

Grid

Minimum Curvature

edm

Project ATLAS PROSPECT (NM-E)

Map System: US State Plane 1927 (Exact solution)

Geo Datum: NAD 1927 (NADCON CONUS)

Map Zone: New Mexico East 3001

) System Datum: Mean Sea Level

Well TATER SALAD FED COM 902H

Well Position +N/-S 0.0 usft **Northing**: 376,449.70 usft **Latitude**: 32° 2' 4.648 N

+E/-W 0.0 usft **Easting**: 592,375.00 usft **Longitude**: 104° 2' 6.838 W

Position Uncertainty 3.0 usft Wellhead Elevation: usft Ground Level: 2,913.0 usft

Wellbore OWB

 Magnetics
 Model Name
 Sample Date
 Declination (°)
 Dip Angle (°)
 Field Strength (nT)

 IGRF2015
 3/24/2020
 6.85
 59.78
 47.496.78729397

Design PWP1

Audit Notes:

Version: Phase: PLAN Tie On Depth: 0.0

Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°)

(usft) (usft) (usft) (°)

0.0 0.0 0.0 358.74

Survey Tool Program Date 5/19/2020

From To
(usft) (usft) Survey (Wellbore) Tool Name Description

0.0 9,751.0 PWP1 (OWB) Standard Keeper 104 Standard Wireline Keeper ver 1.0.4
9,751.0 21,015.8 PWP1 (OWB) MWD+IFR1+FDIR OWSG MWD + IFR1 + FDIR Correction

Planned Survey

| . iaimoa cai voj | | | | | | | | | | |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|--|
| 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) | |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 100.0 | 0.00 | 0.00 | 100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 300.0 | 0.00 | 0.00 | 300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 400.0 | 0.00 | 0.00 | 400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 500.0 600.0 | 0.00 0.00 | 0.00 0.00 | 500.0 600.0 | 0.0 0.0 | 0.0 0.0 | 0.0 0.0 | 0.00 | 0.00 0.00 | 0.00 0.00 | |
| 700.0 | 0.00 | 0.00 | 700.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 800.0 | 0.00 | 0.00 | 800.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 900.0 | 0.00 | 0.00 | 900.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 1,000.0 | 0.00 | 0.00 | 1,000.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 1,100.0 | 0.00 | 0.00 | 1,100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 1,200.0 | 0.00 | 0.00 | 1,200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 1,300.0 | 0.00 | 0.00 | 1,300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 1,400.0 | 0.00 | 0.00 | 1,400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |

Survey Report

Company: **DELAWARE BASIN WEST** Project: ATLAS PROSPECT (NM-E)

Site: TATER SALAD & MOMBA FED (ATLAS 2628)

Well: TATER SALAD FED COM 902H

Wellbore: OWB Design: PWP1 Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Database:

Well TATER SALAD FED COM 902H KB=27' @ 2940.0usft (Nabors 893) KB=27' @ 2940.0usft (Nabors 893)

Minimum Curvature

| Measured | | | Vertical | | | Vertical | Dogleg | Build | Turn |
|--------------------|------------------------|----------------|-----------------|-----------------|-----------------|-------------------|---------------------|---------------------|---------------------|
| Depth (usft) | Inclination (°) | Azimuth (°) | Depth (usft) | +N/-S (usft) | +E/-W (usft) | Section (usft) | Rate (°/100usft) | Rate (°/100usft) | Rate (°/100usft) |
| 1,500.0 | 0.00 | 0.00 | 1,500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,600.0 | 0.00 | 0.00 | 1,600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,700.0 | 0.00 | 0.00 | 1,700.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,800.0 | 0.00 | 0.00 | 1,800.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,900.0 | 0.00 | 0.00 | 1,900.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,000.0 | 0.00 | 0.00 | 2,000.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,100.0 | 0.00 | 0.00 | 2,100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,200.0 | 0.00 | 0.00 | 2,200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,300.0 | 0.00 | 0.00 | 2,300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,400.0 | 0.00 | 0.00 | 2,400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,500.0 | 0.00 | 0.00 | 2,500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| Start Build | | 044.00 | 2.000.0 | 4 5 | 0.0 | 4.5 | 0.00 | 0.00 | 0.00 |
| 2,600.0 2.657.1 | 2.00 | 211.28 | 2,600.0 | -1.5 | -0.9 | -1.5 | 2.00 | 2.00 | 0.00 |
| , | 3.14 1 hold at 2657 | 211.28 | 2,657.0 | -3.7 | -2.2 | -3.6 | 2.00 | 2.00 | 0.00 |
| 2,700.0 | 3.14 | 211.28 | 2,699.9 | -5.7 | -3.5 | -5.6 | 0.00 | 0.00 | 0.00 |
| 2,800.0 | 3.14 | 211.28 | 2,799.7 | -10.4 | -6.3 | -10.2 | 0.00 | 0.00 | 0.00 |
| 2,900.0 | 3.14 | 211.28 | 2,899.6 | -15.1 | -9.1 | -14.9 | 0.00 | 0.00 | 0.00 |
| 3,000.0 | 3.14 | 211.28 | 2,999.4 | -19.7 | -12.0 | -19.5 | 0.00 | 0.00 | 0.00 |
| 3,100.0 | 3.14 | 211.28 | 3,099.3 | -24.4 | -14.8 | -24.1 | 0.00 | 0.00 | 0.00 |
| 3,200.0 | 3.14 | 211.28 | 3,199.1 | -29.1 | -17.7 | -28.7 | 0.00 | 0.00 | 0.00 |
| 3,300.0 | 3.14 | 211.28 | 3,299.0 | -33.8 | -20.5 | -33.3 | 0.00 | 0.00 | 0.00 |
| 3,400.0 | 3.14 | 211.28 | 3,398.8 | -38.5 | -23.4 | -38.0 | 0.00 | 0.00 | 0.00 |
| 3,500.0 | 3.14 | 211.28 | 3,498.7 | -43.2 | -26.2 | -42.6 | 0.00 | 0.00 | 0.00 |
| 3,600.0 | 3.14 | 211.28 | 3,598.5 | -47.8 | -29.1 | -47.2 | 0.00 | 0.00 | 0.00 |
| 3,700.0 | 3.14 | 211.28 | 3,698.4 | -52.5 | -31.9 | -51.8 | 0.00 | 0.00 | 0.00 |
| 3,800.0 | 3.14 | 211.28 | 3,798.2 | -57.2 | -34.8 | -56.4 | 0.00 | 0.00 | 0.00 |
| 3,900.0 | 3.14 | 211.28 | 3,898.1 | -61.9 | -37.6 | -61.1 | 0.00 | 0.00 | 0.00 |
| 4,000.0 | 3.14 | 211.28 | 3,997.9 | -66.6 | -40.4 | -65.7 | 0.00 | 0.00 | 0.00 |
| 4,100.0 | 3.14 | 211.28 | 4,097.8 | -71.3 | -43.3 | -70.3 | 0.00 | 0.00 | 0.00 |
| 4,200.0 | 3.14 | 211.28 | 4,197.6 | -75.9 | -46.1 | -74.9 | 0.00 | 0.00 | 0.00 |
| 4,300.0 | 3.14 | 211.28 | 4,297.5 | -80.6 | -49.0 | -79.5 | 0.00 | 0.00 | 0.00 |
| 4,400.0 | 3.14 | 211.28 | 4,397.3 | -85.3 | -51.8 | -84.2 | 0.00 | 0.00 | 0.00 |
| 4,500.0 | 3.14 | 211.28 | 4,497.2 | -90.0 | -54.7 | -88.8 | 0.00 | 0.00 | 0.00 |
| 4,600.0 | 3.14 | 211.28 | 4,597.0 | -94.7 | -57.5 | -93.4 | 0.00 | 0.00 | 0.00 |
| 4,700.0 | 3.14 | 211.28 | 4,696.9 | -99.4 | -60.4 | -98.0 | 0.00 | 0.00 | 0.00 |
| 4,800.0 | 3.14 | 211.28 | 4,796.7 | -104.0 | -63.2 | -102.6 | 0.00 | 0.00 | 0.00 |
| 4,900.0 | 3.14 | 211.28 | 4,896.6 | -108.7 | -66.0 | -107.3 | 0.00 | 0.00 | 0.00 |
| 5,000.0 | 3.14 | 211.28 | 4,996.4 | -113.4 | -68.9 | -111.9 | 0.00 | 0.00 | 0.00 |
| 5,100.0 | 3.14 | 211.28 | 5,096.3 | -118.1 | -71.7 | -116.5 | 0.00 | 0.00 | 0.00 |
| 5,200.0 | 3.14 | 211.28 | 5,196.1 | -122.8 | -74.6 | -121.1 | 0.00 | 0.00 | 0.00 |
| 5,300.0 | 3.14 | 211.28 | 5,295.9 | -127.5 | -77.4 | -125.7 | 0.00 | 0.00 | 0.00 |
| 5,400.0 | 3.14 | 211.28 | 5,395.8 | -132.1 | -80.3 | -130.4 | 0.00 | 0.00 | 0.00 |

Survey Report

Company: DELAWARE BASIN WEST Project: ATLAS PROSPECT (NM-E)

Site: TATER SALAD & MOMBA FED (ATLAS 2628)

Well: TATER SALAD FED COM 902H

Wellbore: OWB

Design: PWP1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Database:

Well TATER SALAD FED COM 902H KB=27' @ 2940.0usft (Nabors 893)

KB=27' @ 2940.0usft (Nabors 893)

Grid

Minimum Curvature

| gii. Fv | VFI | | | Database | - | | cuiii | | |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| ned 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) |
| 5,500.0 | 3.14 | 211.28 | 5,495.6 | -136.8 | -83.1 | -135.0 | 0.00 | 0.00 | 0.00 |
| 5,600.0 | 3.14 | 211.28 | 5,595.5 | -141.5 | -86.0 | -139.6 | 0.00 | 0.00 | 0.00 |
| 5,700.0 | 3.14 | 211.28 | 5,695.3 | -146.2 | -88.8 | -144.2 | 0.00 | 0.00 | 0.00 |
| 5,800.0 | 3.14 | 211.28 | 5,795.2 | -150.9 | -91.7 | -148.8 | 0.00 | 0.00 | 0.00 |
| 5,900.0 | 3.14 | 211.28 | 5,895.0 | -155.6 | -94.5 | -153.5 | 0.00 | 0.00 | 0.00 |
| 6,000.0 | 3.14 | 211.28 | 5,994.9 | -160.2 | -97.3 | -158.1 | 0.00 | 0.00 | 0.00 |
| 6,100.0 | 3.14 | 211.28 | 6,094.7 | -164.9 | -100.2 | -162.7 | 0.00 | 0.00 | 0.00 |
| 6,200.0 | 3.14 | 211.28 | 6,194.6 | -169.6 | -103.0 | -167.3 | 0.00 | 0.00 | 0.00 |
| 6,300.0 | 3.14 | 211.28 | 6,294.4 | -174.3 | -105.9 | -171.9 | 0.00 | 0.00 | 0.00 |
| 6,400.0 | 3.14 | 211.28 | 6,394.3 | -179.0 | -108.7 | -176.5 | 0.00 | 0.00 | 0.00 |
| 6,500.0 | 3.14 | 211.28 | 6,494.1 | -183.7 | -111.6 | -181.2 | 0.00 | 0.00 | 0.00 |
| 6,600.0 | 3.14 | 211.28 | 6,594.0 | -188.4 | -114.4 | -185.8 | 0.00 | 0.00 | 0.00 |
| 6,700.0 | 3.14 | 211.28 | 6,693.8 | -193.0 | -117.3 | -190.4 | 0.00 | 0.00 | 0.00 |
| 6,800.0 | 3.14 | 211.28 | 6,793.7 | -197.7 | -120.1 | -195.0 | 0.00 | 0.00 | 0.00 |
| 6,900.0 | 3.14 | 211.28 | 6,893.5 | -202.4 | -123.0 | -199.6 | 0.00 | 0.00 | 0.00 |
| 7,000.0 | 3.14 | 211.28 | 6,993.4 | -207.1 | -125.8 | -204.3 | 0.00 | 0.00 | 0.00 |
| 7,100.0 | 3.14 | 211.28 | 7,093.2 | -211.8 | -128.6 | -208.9 | 0.00 | 0.00 | 0.00 |
| 7,200.0 | 3.14 | 211.28 | 7,193.1 | -216.5 | -131.5 | -213.5 | 0.00 | 0.00 | 0.00 |
| 7,300.0 | 3.14 | 211.28 | 7,292.9 | -221.1 | -134.3 | -218.1 | 0.00 | 0.00 | 0.00 |
| 7,400.0 | 3.14 | 211.28 | 7,392.8 | -225.8 | -137.2 | -222.7 | 0.00 | 0.00 | 0.00 |
| 7,500.0 | 3.14 | 211.28 | 7,492.6 | -230.5 | -140.0 | -227.4 | 0.00 | 0.00 | 0.00 |
| 7,600.0 | 3.14 | 211.28 | 7,592.5 | -235.2 | -142.9 | -232.0 | 0.00 | 0.00 | 0.00 |
| 7,700.0 | 3.14 | 211.28 | 7,692.3 | -239.9 | -145.7 | -236.6 | 0.00 | 0.00 | 0.00 |
| 7,800.0 | 3.14 | 211.28 | 7,792.2 | -244.6 | -148.6 | -241.2 | 0.00 | 0.00 | 0.00 |
| 7,900.0 | 3.14 | 211.28 | 7,892.0 | -249.2 | -151.4 | -245.8 | 0.00 | 0.00 | 0.00 |
| 8,000.0 | 3.14 | 211.28 | 7,991.9 | -253.9 | -154.2 | -250.5 | 0.00 | 0.00 | 0.00 |
| 8,100.0 | 3.14 | 211.28 | 8,091.7 | -258.6 | -157.1 | -255.1 | 0.00 | 0.00 | 0.00 |
| 8,200.0 | 3.14 | 211.28 | 8,191.6 | -263.3 | -159.9 | -259.7 | 0.00 | 0.00 | 0.00 |
| 8,300.0 | 3.14 | 211.28 | 8,291.4 | -268.0 | -162.8 | -264.3 | 0.00 | 0.00 | 0.00 |
| 8,400.0 | 3.14 | 211.28 | 8,391.3 | -272.7 | -165.6 | -268.9 | 0.00 | 0.00 | 0.00 |
| 8,500.0 | 3.14 | 211.28 | 8,491.1 | -277.3 | -168.5 | -273.6 | 0.00 | 0.00 | 0.00 |
| 8,600.0 | 3.14 | 211.28 | 8,591.0 | -282.0 | -171.3 | -278.2 | 0.00 | 0.00 | 0.00 |
| 8,700.0 | 3.14 | 211.28 | 8,690.8 | -286.7 | -174.2 | -282.8 | 0.00 | 0.00 | 0.00 |
| 8,800.0 | 3.14 | 211.28 | 8,790.7 | -291.4 | -177.0 | -287.4 | 0.00 | 0.00 | 0.00 |
| 8,900.0 | 3.14 | 211.28 | 8,890.5 | -296.1 | -179.9 | -292.0 | 0.00 | 0.00 | 0.00 |
| 9,000.0 | 3.14 | 211.28 | 8,990.4 | -300.8 | -182.7 | -296.7 | 0.00 | 0.00 | 0.00 |
| 9,100.0 | 3.14 | 211.28 | 9,090.2 | -305.4 | -185.5 | -301.3 | 0.00 | 0.00 | 0.00 |
| 9,200.0 | 3.14 | 211.28 | 9,190.1 | -310.1 | -188.4 | -305.9 | 0.00 | 0.00 | 0.00 |
| 9,300.0 | 3.14 | 211.28 | 9,289.9 | -314.8 | -191.2 | -310.5 | 0.00 | 0.00 | 0.00 |
| 9,400.0 | 3.14 | 211.28 | 9,389.8 | -319.5 | -194.1 | -315.1 | 0.00 | 0.00 | 0.00 |
| 9,500.0 | 3.14 | 211.28 | 9,489.6 | -324.2 | -196.9 | -319.8 | 0.00 | 0.00 | 0.00 |
| 9,600.0 | 3.14 | 211.28 | 9,589.5 | -328.9 | -199.8 | -324.4 | 0.00 | 0.00 | 0.00 |
| 9,700.0 | 3.14 | 211.28 | 9,689.3 | -333.5 | -202.6 | -329.0 | 0.00 | 0.00 | 0.00 |
| 9,751.2 | 3.14 | 211.28 | 9,740.5 | -335.9 | -204.1 | -331.4 | 0.00 | 0.00 | 0.00 |

Survey Report

Company: DELAWARE BASIN WEST Project: ATLAS PROSPECT (NM-E)

Site: TATER SALAD & MOMBA FED (ATLAS 2628)

Well: TATER SALAD FED COM 902H

Wellbore: OWB
Design: PWP1

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference:

Survey Calculation Method: Database:

Well TATER SALAD FED COM 902H KB=27' @ 2940.0usft (Nabors 893) KB=27' @ 2940.0usft (Nabors 893)

Grid

Minimum Curvature

| sign: PW | P1 | | | Database |). | | edm | | |
|-----------------------------|-----------------|------------------|-----------------------------|-----------------|------------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| nned 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) |
| Start DLS 1 | 0.00 TFO 148 | .63 | | | | | | | |
| 9,800.0 | 2.74 | 323.30 | 9,789.2 | -336.2 | -205.5 | -331.6 | 10.00 | -0.83 | 229.61 |
| 9,900.0 | 12.30 | 352.43 | 9,888.3 | -323.6 | -208.3 | -319.0 | 10.00 | 9.57 | 29.13 |
| 10.000.0 | 22.25 | 355.95 | 9,983.6 | -294.1 | -211.0 | -289.4 | 10.00 | 9.95 | 3.52 |
| 10.100.0 | 32.23 | 357.35 | 10,072.4 | -248.5 | -213.6 | -243.7 | 10.00 | 9.98 | 1.41 |
| 10,200.0 | 42.22 | 358.15 | 10,072.4 | -188.1 | -215.9 | -183.3 | 10.00 | 9.99 | 0.79 |
| 10,200.0 | 42.22 | 330.13 | 10, 132.0 | -100.1 | -210.9 | -100.0 | 10.00 | 9.99 | 0.79 |
| 10,300.0 | 52.21 | 358.68 | 10,219.8 | -114.8 | -218.0 | -110.0 | 10.00 | 9.99 | 0.53 |
| 10,400.0 | 62.21 | 359.09 | 10,273.9 | -30.9 | - 219.6 | -26.0 | 10.00 | 9.99 | 0.41 |
| 10,500.0 | 72.20 | 359.42 | 10,312.6 | 61.2 | -220.8 | 66.0 | 10.00 | 10.00 | 0.34 |
| 10,600.0 | 82.20 | 359.72 | 10,334.7 | 158.6 | -221.5 | 163.4 | 10.00 | 10.00 | 0.30 |
| 10,675.3 | 89.72 | 359.94 | 10,340.0 | 233.6 | -221.7 | 238.4 | 10.00 | 10.00 | 0.29 |
| Start 10340 | .5 hold at 106 | | | | | | | | |
| 10,700.0 | 89.72 | 359.94 | 10,340.1 | 258.3 | -221.7 | 263.1 | 0.00 | 0.00 | 0.00 |
| 10,700.0 | 89.72 | 359.94 | 10,340.1 | 358.3 | -221.7 -221.8 | 363.1 | 0.00 | 0.00 | 0.00 |
| 10,800.0 | 89.72 | 359.94 359.94 | 10,340.0 | 458.3 | -221.6 -221.9 | 463.1 | 0.00 | 0.00 | 0.00 |
| 11,000.0 | 89.72 | 359.94 359.94 | 10,341.1 | 558.3 | -221.9 -222.0 | 563.1 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | |
| 11,100.0 | 89.72 | 359.94 | 10,342.1 | 658.3 | -222.1 | 663.1 | 0.00 | 0.00 | 0.00 |
| 11,200.0 | 89.72 | 359.94 | 10,342.5 | 758.3 | -222.3 | 763.0 | 0.00 | 0.00 | 0.00 |
| 11,300.0 | 89.72 | 359.94 | 10,343.0 | 858.3 | -222.4 | 863.0 | 0.00 | 0.00 | 0.00 |
| 11,400.0 | 89.72 | 359.94 | 10,343.5 | 958.3 | -222.5 | 963.0 | 0.00 | 0.00 | 0.00 |
| 11,500.0 | 89.72 | 359.94 | 10,344.0 | 1,058.3 | -222.6 | 1,063.0 | 0.00 | 0.00 | 0.00 |
| 11,600.0 | 89.72 | 359.94 | 10,344.5 | 1,158.3 | -222.7 | 1,162.9 | 0.00 | 0.00 | 0.00 |
| 11,700.0 | 89.72 | 359.94 | 10,345.0 | 1,258.3 | -222.8 | 1,262.9 | 0.00 | 0.00 | 0.00 |
| 11,800.0 | 89.72 | 359.94 | 10,345.4 | 1,358.3 | -222.9 | 1,362.9 | 0.00 | 0.00 | 0.00 |
| 11,900.0 | 89.72 | 359.94 | 10,345.9 | 1,458.3 | -223.0 | 1,462.9 | 0.00 | 0.00 | 0.00 |
| 12,000.0 | 89.72 | 359.94 | 10,346.4 | 1,558.3 | -223.1 | 1,562.8 | 0.00 | 0.00 | 0.00 |
| 12,100.0 | 89.72 | 359.94 | 10,346.9 | 1,658.3 | -223.2 | 1,662.8 | 0.00 | 0.00 | 0.00 |
| , | 30 = | 000.01 | 10,010.0 | .,000.0 | | .,002.0 | 0.00 | 0.00 | 0.00 |
| 12,200.0 | 89.72 | 359.94 | 10,347.4 | 1,758.3 | -223.3 | 1,762.8 | 0.00 | 0.00 | 0.00 |
| 12,300.0 | 89.72 | 359.94 | 10,347.9 | 1,858.3 | -223.4 | 1,862.8 | 0.00 | 0.00 | 0.00 |
| 12,400.0 | 89.72 | 359.94 | 10,348.3 | 1,958.3 | -223.5 | 1,962.8 | 0.00 | 0.00 | 0.00 |
| 12,500.0 | 89.72 | 359.94 | 10,348.8 | 2,058.3 | -223.6 | 2,062.7 | 0.00 | 0.00 | 0.00 |
| 12,600.0 | 89.72 | 359.94 | 10,349.3 | 2,158.3 | -223.7 | 2,162.7 | 0.00 | 0.00 | 0.00 |
| 12,700.0 | 89.72 | 359.94 | 10,349.8 | 2,258.3 | -223.8 | 2,262.7 | 0.00 | 0.00 | 0.00 |
| 12,800.0 | 89.72 | 359.94 | 10,349.0 | 2,358.3 | -223.9 | 2,362.7 | 0.00 | 0.00 | 0.00 |
| 12,900.0 | 89.72 | 359.94 | 10,350.8 | 2,458.3 | -224.0 | 2,462.6 | 0.00 | 0.00 | 0.00 |
| 13,000.0 | 89.72 | 359.94 | 10,350.0 | 2,558.3 | -224.2 | 2,562.6 | 0.00 | 0.00 | 0.00 |
| 13,100.0 | 89.72 | 359.94 | 10,351.2 | 2,658.3 | -224.2 | 2,662.6 | 0.00 | 0.00 | 0.00 |
| 10, 100.0 | 00.12 | 000.04 | 13,001.7 | 2,000.0 | 227.0 | 2,002.0 | 0.00 | 0.00 | 0.00 |
| 13,200.0 | 89.72 | 359.94 | 10,352.2 | 2,758.3 | -224.4 | 2,762.6 | 0.00 | 0.00 | 0.00 |
| 13,300.0 | 89.72 | 359.94 | 10,352.7 | 2,858.3 | -224.5 | 2,862.5 | 0.00 | 0.00 | 0.00 |
| 13,400.0 | 89.72 | 359.94 | 10,353.2 | 2,958.3 | -224.6 | 2,962.5 | 0.00 | 0.00 | 0.00 |
| 13,500.0 | 89.72 | 359.94 | 10,353.7 | 3,058.3 | -224.7 | 3,062.5 | 0.00 | 0.00 | 0.00 |
| 13,600.0 | 89.72 | 359.94 | 10,354.1 | 3,158.3 | -224.8 | 3,162.5 | 0.00 | 0.00 | 0.00 |
| 13,700.0 | 89.72 | 359.94 | 10,354.6 | 3,258.3 | -224.9 | 3,262.5 | 0.00 | 0.00 | 0.00 |

Survey Report

Company: DELAWARE BASIN WEST Project: ATLAS PROSPECT (NM-E)

Site: TATER SALAD & MOMBA FED (ATLAS 2628)

Well: TATER SALAD FED COM 902H

Wellbore: OWB
Design: PWP1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Database:

Well TATER SALAD FED COM 902H KB=27' @ 2940.0usft (Nabors 893)

KB=27' @ 2940.0usft (Nabors 893)

Grid

Minimum Curvature

| Jesigii. | | VF I | | | Databas | 9. | | Euiii | | |
|----------|-----------------------------|-----------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| Planned | Survey | | | | | | | | | |
| N | leasured 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) |
| | 13,800.0 | 89.72 | 359.94 | 10,355.1 | 3,358.3 | -225.0 | 3,362.4 | 0.00 | 0.00 | 0.00 |
| | 13,900.0 | 89.72 | 359.94 | 10,355.6 | 3,458.3 | -225.1 | 3,462.4 | 0.00 | 0.00 | 0.00 |
| | 14,000.0 | 89.72 | 359.94 | 10,356.1 | 3,558.3 | -225.2 | 3,562.4 | 0.00 | 0.00 | 0.00 |
| | 14,100.0 | 89.72 | 359.94 | 10,356.6 | 3,658.3 | -225.3 | 3,662.4 | 0.00 | 0.00 | 0.00 |
| | 14,200.0 | 89.72 | 359.94 | 10,357.0 | 3,758.3 | -225.4 | 3,762.3 | 0.00 | 0.00 | 0.00 |
| | 14,300.0 | 89.72 | 359.94 | 10,357.5 | 3,858.3 | -225.5 | 3,862.3 | 0.00 | 0.00 | 0.00 |
| | 14,400.0 | 89.72 | 359.94 | 10,358.0 | 3,958.3 | -225.6 | 3,962.3 | 0.00 | 0.00 | 0.00 |
| | 14,500.0 | 89.72 | 359.94 | 10,358.5 | 4,058.3 | -225.7 | 4,062.3 | 0.00 | 0.00 | 0.00 |
| | 14,600.0 | 89.72 | 359.94 | 10,359.0 | 4,158.3 | -225.8 | 4,162.2 | 0.00 | 0.00 | 0.00 |
| | 14,700.0 | 89.72 | 359.94 | 10,359.5 | 4,258.3 | -225.9 | 4,262.2 | 0.00 | 0.00 | 0.00 |
| | 14,800.0 | 89.72 | 359.94 | 10,359.9 | 4,358.3 | -226.0 | 4,362.2 | 0.00 | 0.00 | 0.00 |
| | 14,900.0 | 89.72 | 359.94 | 10,360.4 | 4,458.3 | -226.2 | 4,462.2 | 0.00 | 0.00 | 0.00 |
| | 15,000.0 | 89.72 | 359.94 | 10,360.9 | 4,558.3 | -226.3 | 4,562.1 | 0.00 | 0.00 | 0.00 |
| | 15,100.0 | 89.72 | 359.94 | 10,361.4 | 4,658.3 | -226.4 | 4,662.1 | 0.00 | 0.00 | 0.00 |
| | 15,200.0 | 89.72 | 359.94 | 10,361.9 | 4,758.3 | -226.5 | 4,762.1 | 0.00 | 0.00 | 0.00 |
| | 15,300.0 | 89.72 | 359.94 | 10,362.4 | 4,858.3 | -226.6 | 4,862.1 | 0.00 | 0.00 | 0.00 |
| | 15,400.0 | 89.72 | 359.94 | 10,362.8 | 4,958.3 | -226.7 | 4,962.1 | 0.00 | 0.00 | 0.00 |
| | 15,500.0 | 89.72 | 359.94 | 10,363.3 | 5,058.3 | -226.8 | 5,062.0 | 0.00 | 0.00 | 0.00 |
| | 15,600.0 | 89.72 | 359.94 | 10,363.8 | 5,158.3 | -226.9 | 5,162.0 | 0.00 | 0.00 | 0.00 |
| | 15,700.0 | 89.72 | 359.94 | 10,364.3 | 5,258.3 | -227.0 | 5,262.0 | 0.00 | 0.00 | 0.00 |
| | 15,800.0 | 89.72 | 359.94 | 10,364.8 | 5,358.3 | -227.1 | 5,362.0 | 0.00 | 0.00 | 0.00 |
| | 15,900.0 | 89.72 | 359.94 | 10,365.3 | 5,458.3 | -227.2 | 5,461.9 | 0.00 | 0.00 | 0.00 |
| | 16,000.0 | 89.72 | 359.94 | 10,365.7 | 5,558.3 | -227.3 | 5,561.9 | 0.00 | 0.00 | 0.00 |
| | 16,100.0 | 89.72 | 359.94 | 10,366.2 | 5,658.3 | -227.4 | 5,661.9 | 0.00 | 0.00 | 0.00 |
| | 16,200.0 | 89.72 | 359.94 | 10,366.7 | 5,758.3 | -227.5 | 5,761.9 | 0.00 | 0.00 | 0.00 |
| | 16,300.0 | 89.72 | 359.94 | 10,367.2 | 5,858.3 | -227.6 | 5,861.8 | 0.00 | 0.00 | 0.00 |
| | 16,400.0 | 89.72 | 359.94 | 10,367.7 | 5,958.3 | -227.7 | 5,961.8 | 0.00 | 0.00 | 0.00 |
| | 16,500.0 | 89.72 | 359.94 | 10,368.2 | 6,058.3 | -227.8 | 6,061.8 | 0.00 | 0.00 | 0.00 |
| | 16,600.0 | 89.72 | 359.94 | 10,368.6 | 6,158.3 | -227.9 | 6,161.8 | 0.00 | 0.00 | 0.00 |
| | 16,700.0 | 89.72 | 359.94 | 10,369.1 | 6,258.3 | -228.1 | 6,261.8 | 0.00 | 0.00 | 0.00 |
| | 16,800.0 | 89.72 | 359.94 | 10,369.6 | 6,358.3 | -228.2 | 6,361.7 | 0.00 | 0.00 | 0.00 |
| | 16,900.0 | 89.72 | 359.94 | 10,370.1 | 6,458.3 | -228.3 | 6,461.7 | 0.00 | 0.00 | 0.00 |
| | 17,000.0 | 89.72 | 359.94 | 10,370.6 | 6,558.3 | -228.4 | 6,561.7 | 0.00 | 0.00 | 0.00 |
| | 17,100.0 | 89.72 | 359.94 | 10,371.1 | 6,658.3 | -228.5 | 6,661.7 | 0.00 | 0.00 | 0.00 |
| | 17,200.0 | 89.72 | 359.94 | 10,371.5 | 6,758.2 | -228.6 | 6,761.6 | 0.00 | 0.00 | 0.00 |
| | 17,300.0 | 89.72 | 359.94 | 10,372.0 | 6,858.2 | -228.7 | 6,861.6 | 0.00 | 0.00 | 0.00 |
| | 17,400.0 | 89.72 | 359.94 | 10,372.5 | 6,958.2 | -228.8 | 6,961.6 | 0.00 | 0.00 | 0.00 |
| | 17,500.0 | 89.72 | 359.94 | 10,373.0 | 7,058.2 | -228.9 | 7,061.6 | 0.00 | 0.00 | 0.00 |
| | 17,600.0 | 89.72 | 359.94 | 10,373.5 | 7,158.2 | -229.0 | 7,161.5 | 0.00 | 0.00 | 0.00 |
| | 17,700.0 | 89.72 | 359.94 | 10,374.0 | 7,258.2 | -229.1 | 7,261.5 | 0.00 | 0.00 | 0.00 |
| | 17,800.0 | 89.72 | 359.94 | 10,374.4 | 7,358.2 | -229.2 | 7,361.5 | 0.00 | 0.00 | 0.00 |
| | 17,900.0 | 89.72 | 359.94 | 10,374.9 | 7,458.2 | -229.3 | 7,461.5 | 0.00 | 0.00 | 0.00 |
| | 18,000.0 | 89.72 | 359.94 | 10,375.4 | 7,558.2 | -229.4 | 7,561.5 | 0.00 | 0.00 | 0.00 |
| | 18,100.0 | 89.72 | 359.94 | 10,375.9 | 7,658.2 | -229.5 | 7,661.4 | 0.00 | 0.00 | 0.00 |

Survey Report

Company: DELAWARE BASIN WEST Project: ATLAS PROSPECT (NM-E)

Site: TATER SALAD & MOMBA FED (ATLAS 2628)

Well: TATER SALAD FED COM 902H

Wellbore: OWB
Design: PWP1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Database:

Well TATER SALAD FED COM 902H KB=27' @ 2940.0usft (Nabors 893)

KB=27' @ 2940.0usft (Nabors 893)

Minimum Curvature

| Depth (usft) | Inclination | Azimuth | Vertical Depth | +N/-S | +E/-W | Vertical Section | Dogleg Rate | Build Rate | Turn Rate |
|----------------------|----------------|------------------|----------------------|----------------------|------------------|----------------------|----------------|---------------|--------------|
| (3.5.1) | (°) | (°) | (usft) | (usft) | (usft) | (usft) | (°/100usft) | (°/100usft) | (°/100usft) |
| 18,200.0 | 89.72 | 359.94 | 10,376.4 | 7,758.2 | -229.6 | 7,761.4 | 0.00 | 0.00 | 0.00 |
| 18,300.0 | 89.72 | 359.94 | 10,376.9 | 7,858.2 | -229.7 | 7,861.4 | 0.00 | 0.00 | 0.00 |
| 18,400.0 | 89.72 | 359.94 | 10,377.3 | 7,958.2 | -229.8 | 7,961.4 | 0.00 | 0.00 | 0.00 |
| 18,500.0 | 89.72 | 359.94 | 10,377.8 | 8,058.2 | -229.9 | 8,061.3 | 0.00 | 0.00 | 0.00 |
| 18,600.0 | 89.72 | 359.94 | 10,378.3 | 8,158.2 | -230.1 | 8,161.3 | 0.00 | 0.00 | 0.00 |
| 18,700.0 | 89.72 | 359.94 | 10,378.8 | 8,258.2 | -230.2 | 8,261.3 | 0.00 | 0.00 | 0.00 |
| 18,800.0 | 89.72 | 359.94 | 10,379.3 | 8,358.2 | -230.3 | 8,361.3 | 0.00 | 0.00 | 0.00 |
| 18,900.0 | 89.72 | 359.94 | 10,379.8 | 8,458.2 | -230.4 | 8,461.2 | 0.00 | 0.00 | 0.00 |
| 19,000.0 | 89.72 | 359.94 | 10,380.2 | 8,558.2 | -230.5 | 8,561.2 | 0.00 | 0.00 | 0.00 |
| 19,100.0 | 89.72 | 359.94 | 10,380.7 | 8,658.2 | -230.6 | 8,661.2 | 0.00 | 0.00 | 0.00 |
| 19,200.0 | 89.72 | 359.94 | 10,381.2 | 8,758.2 | -230.7 | 8,761.2 | 0.00 | 0.00 | 0.00 |
| 19,300.0 | 89.72 | 359.94 | 10,381.7 | 8,858.2 | -230.8 | 8,861.2 | 0.00 | 0.00 | 0.00 |
| 19,400.0 | 89.72 | 359.94 | 10,382.2 | 8,958.2 | -230.9 | 8,961.1 | 0.00 | 0.00 | 0.00 |
| 19,500.0 | 89.72 | 359.94 | 10,382.7 | 9,058.2 | -231.0 | 9,061.1 | 0.00 | 0.00 | 0.00 |
| 19,600.0 | 89.72 | 359.94 | 10,383.1 | 9,158.2 | -231.1 | 9,161.1 | 0.00 | 0.00 | 0.00 |
| 19,700.0 | 89.72 | 359.94 | 10,383.6 | 9,258.2 | -231.2 | 9,261.1 | 0.00 | 0.00 | 0.00 |
| 19,800.0 | 89.72 | 359.94 | 10,384.1 | 9,358.2 | -231.3 | 9,361.0 | 0.00 | 0.00 | 0.00 |
| 19,900.0 | 89.72 | 359.94 | 10,384.6 | 9,458.2 | -231.4 | 9,461.0 | 0.00 | 0.00 | 0.00 |
| 20,000.0 | 89.72 | 359.94 | 10,385.1 | 9,558.2 | -231.5 | 9,561.0 | 0.00 | 0.00 | 0.00 |
| 20,100.0 | 89.72 | 359.94 | 10,385.6 | 9,658.2 | -231.6 | 9,661.0 | 0.00 | 0.00 | 0.00 |
| 20,200.0 | 89.72 | 359.94 | 10,386.0 | 9,758.2 | -231.7 | 9,760.9 | 0.00 | 0.00 | 0.00 |
| 20,300.0 | 89.72 | 359.94 | 10,386.5 | 9,858.2 | -231.8 | 9,860.9 | 0.00 | 0.00 | 0.00 |
| 20,400.0 | 89.72 | 359.94 | 10,387.0 | 9,958.2 | -232.0 | 9,960.9 | 0.00 | 0.00 | 0.00 |
| 20,500.0 | 89.72 | 359.94 | 10,387.5 | 10,058.2 | -232.1 | 10,060.9 | 0.00 | 0.00 | 0.00 |
| 20,600.0 | 89.72 | 359.94 | 10,388.0 | 10,158.2 | -232.2 | 10,160.9 | 0.00 | 0.00 | 0.00 |
| 20,700.0 | 89.72 | 359.94 | 10,388.5 | 10,258.2 | -232.3 | 10,260.8 | 0.00 | 0.00 | 0.00 |
| 20,800.0 | 89.72 | 359.94 | 10,388.9 | 10,358.2 | -232.4 | 10,360.8 | 0.00 | 0.00 | 0.00 |
| 20,900.0 | 89.72 | 359.94 | 10,389.4 | 10,458.2 | -232.5 | 10,460.8 | 0.00 | 0.00 | 0.00 |
| 21,000.0 21,015.8 | 89.72 89.72 | 359.94 359.94 | 10,389.9 10,390.0 | 10,558.2 10,574.0 | -232.6 -232.6 | 10,560.8 10,576.6 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 |

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Grid

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 |
| FTP (TATER SALAD - plan hits target of a Circle (radius 50) | center | 0.00 | 10,340.0 | 233.6 | -221.7 | 376,683.30 | 592,153.30 | 32° 2' 6.966 N | 104° 2' 9.406 W |
| LTP (TATER SALAD - plan misses targ - Point | | | 10,390.0 0885.8usft | 10,444.0 MD (10389.4 | -232.5 4 TVD, 10444 | 386,893.70 4.0 N, -232.5 E) | 592,142.50 | 32° 3' 48.013 N | 104° 2' 9.205 W |
| PBHL (TATER SALAI - plan hits target of - Rectangle (sides | center | | 10,390.0 0.0) | 10,574.0 | -232.6 | 387,023.70 | 592,142.40 | 32° 3′ 49.300 N | 104° 2' 9.202 W |

| Plan Annotations | | | | |
|----------------------------|-------------------------------|-----------------------------|------------------------------|----------------------------------|
| Measure Depth (usft) | d Vertical Depth (usft) | Local Co +N/-S (usft) | ordinates +E/-W (usft) | Comment |
| 25 | 00 2500 | 0 | 0 | Start Build 2.00 |
| 26 | 57 2657 | -4 | -2 | Start 7094.1 hold at 2657.1 MD |
| 97 | 51 9740 | -336 | -204 | Start DLS 10.00 TFO 148.63 |
| 10,6 | 75 10,340 | 234 | -222 | Start 10340.5 hold at 10675.3 MD |
| 21,0 | 16 10,390 | 10,574 | -233 | TD at 21015.8 |

| Checked Bv: | Approved By: | Date: |
|-------------|--------------|-------|
| | | |

1. Geologic Formations

| TVD of target | 10,390' EOL | Pilot hole depth | NA |
|---------------|-------------|-------------------------------|------|
| MD at TD: | 21,016' | Deepest expected fresh water: | 175' |

| Formation | Depth (TVD) from KB | Water/Mineral Bearing/ Target Zone? | Hazards* |
|----------------------|------------------------|--|----------|
| Quaternary Fill | Surface | Water | |
| Rustler | 460 | Water | |
| Top of Salt | 590 | Salt | |
| Base of Salt | 2465 | Salt | |
| Lamar | 2665 | Salt Water | |
| Bell Canyon | 2700 | Salt Water | |
| Cherry Canyon | 3540 | Oil/Gas | |
| Brushy Canyon | 4790 | Oil/Gas | |
| Bone Spring Lime | 6365 | Oil/Gas | |
| 1st Bone Spring Sand | 7290 | Oil/Gas | |
| 3rd Bone Spring Sand | 9115 | Oil/Gas | |
| Wolfcamp | 9390 | Oil/Gas | |
| Wolfcamp B | 9890 | Oil/Gas | |
| Wolfcamp C | 10215 | Oil/Gas | |
| Wolfcamp D | 10515 | Target Oil/Gas | |

2. Casing Program

| Hole Size | Casing | g Interval | Csg. Size | Weight | Grada | Conn. | SF | SF Burst | SF |
|-----------|--------|------------|-----------|---------------------------|-------|-------|----------|----------|--------------------|
| noie Size | From | То | Csg. Size | (lbs) | Grade | Comm. | Collapse | or burst | Tension |
| 14.75 | 0 | 575 | 10.75 | 45.5 | J55 | STC | 8.13 | 16.01 | 18.84 |
| 9.875 | 0 | 9600 | 7.625 | 29.7 | HCL80 | втс | 1.85 | 1.37 | 2.53 |
| 6.75 | 0 | 9400 | 5.5" | 23 | P110 | BTC | 2.36 | 2.67 | 3.05 |
| 6.75 | 9400 | 21,016 | 5.5" | 23 | P110 | SF | 2.24 | 2.67 | 2.97 |
| - | | | | BLM Minimum Safety Factor | | | | 1 | 1.6 Dry 1.8 Wet |

Intermediate casing will be kept at least 1/3 full while running casing.to mitigate collapse. Intermediate burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface. All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

| | Y or N |
|--|--------|
| Is casing new? If used, attach certification as required in Onshore Order #1 | Υ |
| Does casing meet API specifications? If no, attach casing specification sheet. | Υ |
| Is premium or uncommon casing planned? If yes attach casing specification sheet. | N |
| Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria). | Y |
| Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing? | Y |
| | |
| Is well located within Capitan Reef? | N |
| If yes, does production casing cement tie back a minimum of 50' above the Reef? | |
| Is well within the designated 4 string boundary? | |
| | 2.1 |
| Is well located in SOPA but not in R-111-P? | N |
| If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back | |
| 500' into previous casing? | |
| Is well located in R-111-P and SOPA? | N |
| If yes, are the first three strings cemented to surface? | IN |
| Is 2 nd string set 100' to 600' below the base of salt? | |
| is 2 string set 100 to 600 below the base of sait? | |
| Is well located in high Cave/Karst? | N |
| If yes, are there two strings cemented to surface? | |
| (For 2 string wells) If yes, is there a contingency casing if lost circulation occurs? | |
| | |
| Is well located in critical Cave/Karst? | N |
| If yes, are there three strings cemented to surface? | |

3. Cementing Program

| Casing | # Sks | Wt. lb/ | Yld ft3/ | H₂0 gal/sk | 500# Comp. Strength (hours) | Slurry Description |
|----------|-------|---------|----------|------------|-----------------------------------|-----------------------------|
| Surf. | 160 | 13.5 | 1.75 | 9 | 12 | Lead: Class C + 4% Gel |
| 250 | 250 | 14.8 | 1.34 | 6.34 | 8 | Tail: Class C + 2% CaCl2 |
| Inter. | 1400 | 11 | 2.8 | 19 | 48 | Lead: NeoCem |
| mer. | 300 | 16.4 | 1.1 | 5 | 8 | Tail: Class H |
| 5.5 Prod | 750 | 12.7 | 2 | 10.6 | 16 | Lead: 35:65:6 H Blend |
| 5.5 P100 | 1200 | 14.4 | 1.24 | 5.7 | 19 | Tail: 50:50:2 Class H Blend |

Volumes Subject to Observed Hole Conditions and/or Fluid Caliper Results Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

| Casing String | TOC | % Excess |
|------------------------------|--------|----------|
| Surface | 0' | 50% |
| 1 st Intermediate | 0' | 50% |
| Production | 9,100' | 35% |

4. Pressure Control Equipment

A variance is requested for the use of a diverter on the surface casing. See attached for schematic.

| BOP installed and tested before drilling which hole? | Size? | Min. Required WP | Туре | | x | Tested to: | |
|--|---------|------------------------|--------|--------|-------|------------|------|
| | | 3М | Ann | ular | Х | 2500 psi | |
| 12-1/4" | 13-5/8" | | Blind | Ram | | 3M | |
| | | | Pipe | Ram | Х | | |
| | | | | Double | e Ram | Х | SIVI |
| | | | Other* | | | | |
| | | | 5M Aı | nnular | Χ | 2500 psi | |
| 8 1/2" | 13-5/8" | 5M | Blind | Ram | | | |
| | | | Pipe | Ram | Χ | 5M | |
| | | | Double | e Ram | Χ | SIVI | |
| | | | Other* | | | | |

BOP and BOPE will be installed per Onshore Order #2 requirements prior to drilling below the surface casing and will be rated to the above pressure rating or greater, see attached diagrams. Required safety valves, with appropriate wrenches and subs for the drill string being utilized, will be in the open position and accessible on the rig floor. BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valves (inside BOP and full-opening valve) with appropriate wrenches and choke lines and choke manifold. See attached schematics.

| | Formation integrity test will be performed per Onshore Order #2. |
|---|--|
| Y | On Exploratory wells or 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. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i. |
| Y | A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart. |
| | N Are anchors required by manufacturer? |
| Y | A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. |

4

5. Mud Program

| Depth | | Type | Weight | Viscosity | Water Loss |
|----------|------------|-------------------|-----------|-----------|------------|
| From | То | туре | (ppg) | Viscosity | Water Loss |
| 0 | Surf. Shoe | FW Gel | 8.4 - 8.6 | 28-29 | N/C |
| Surf csg | Int shoe | Diesel Brine Emul | 8.6 - 9.4 | 30-40 | N/C |
| Int shoe | Lateral TD | OBM | 10.5 - 12 | 30-40 | 20 |

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

| What will be used to monitor the loss or gain of fluid? | PVT/Pason/Visual Monitoring |
|---|-----------------------------|
| | |

6. Logging and Testing Procedures

| Logging, Coring and Testing. | | | | |
|------------------------------|---|--|--|--|
| Υ | Will run GR/CNL from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM. | | | |
| N | Are Logs are planned based on well control or offset log information. | | | |
| N | Drill stem test? If yes, explain. | | | |
| N | Coring? If yes, explain. | | | |

| Additional logs planned | | Interval |
|-------------------------|-------------|---|
| N | Resistivity | Pilot Hole TD to ICP |
| N | Density | Pilot Hole TD to ICP |
| Y | CBL | Production casing (If cement not circulated to surface) |
| Υ | Mud log | Intermediate shoe to TD |
| N | PEX | |

7. Drilling Conditions

| Condition | Specify what type and where? | |
|----------------------------|------------------------------|--|
| BH Pressure at deepest TVD | 6485 psi at 10390' TVD | |
| Abnormal Temperature | NO 160 Deg. F. | |

No abnormal pressure or temperature conditions are anticipated. Sufficient mud materials to maintain mud properties and weight increase requirements will be kept on location at all times.

Sufficient supplies of Paper/LCM for periodic sweeps to control seepage and losses will be maintained on location.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

| N H2S is present | |
|---------------------|--|
| Y H2S Plan attached | |

8. Other Facets of Operation

| Y | Is it a walking operation? |
|---|----------------------------|
| Y | Is casing pre-set? |
| Y | Multi-Bowl Wellhead |

| × | H2S Plan. |
|---|-------------------------|
| × | BOP & Choke Schematics. |
| × | Directional Plan |
| | 5M Annular Variance |

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

Data: 5/28/2020

State of New Mexico Energy, Minerals and Natural Resources Department

Submit Original to Appropriate District Office

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

GAS CAPTURE PLAN

| Date. <u>3/28/2020</u> | |
|--|---|
| ☑ Original☐ Amended - Reason for Amendment: | Operator & OGRID No.: COG Operating LLC, OGRID 229137 |
| Amended - Reason for Amendment. | |

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

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

Well(s)/Production Facility – Name of facility

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

| Well Name | API | Well Location (ULSTR) | Footages | Expected MCF/D | Flared or Vented | Comments |
|---------------------------------|---------|--------------------------|-------------------------|----------------|---------------------|-------------------------------|
| Tater Salad Federal Com 902H | 30-015- | A-24-26S-28E | 225' FNL & 1090' FEL | 7,995 MCFD | | Gas will connect on well pad. |

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to <u>ETC</u> and will be connected to <u>Red Bluff low/high</u> pressure gathering system located in <u>Culberson County</u>, <u>Texas</u>. It will require approximately <u>0</u>' of pipeline on lease to connect the facility to <u>low/high</u> pressure gathering system. <u>COG Operating LLC</u> provides (periodically) to <u>ETC</u> a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, <u>COG Operating LLC</u> and <u>ETC</u> have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at <u>Red Bluff</u> Processing Plant located in <u>Sec 35-Blk 57-T2 Culberson</u>, <u>Texas</u>. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

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

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

Alternatives to Reduce Flaring

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

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

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| □ Original | Operator & OGRID No.: COG Operating LLC, OGRID 229137 |
| ☐ Amended - Reason for Amendment: | |

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