

|                       |          |                |                         |             |                           |
|-----------------------|----------|----------------|-------------------------|-------------|---------------------------|
| 12/23/2013<br>DATE IN | SUSPENSE | MM<br>ENGINEER | 12/24/2013<br>LOGGED IN | NSP<br>TYPE | PMAM1335841385<br>APP NO. |
|-----------------------|----------|----------------|-------------------------|-------------|---------------------------|

ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
- Engineering Bureau -  
1220 South St. Francis Drive, Santa Fe, NM 87505



**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Application Acronyms:**

**[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]**  
**[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]**  
**[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]**  
**[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]**  
**[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]**  
**[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]**

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]
- [A] Location - Spacing Unit - Simultaneous Dedication  
☐ NSL ☒ NSP ☐ SD
- Check One Only for [B] or [C]
- [B] Commingling - Storage - Measurement  
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR
- [D] Other: Specify \_\_\_\_\_
- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply
- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
- [B] ☒ Offset Operators, Leaseholders or Surface Owner
- [C] ☐ Application is One Which Requires Published Legal Notice
- [D] ☐ Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] ☐ Waivers are Attached

COG  
NSP  
30-015-41538

2013 DEC 23 PM 2:51  
RECEIVED OOD

- [3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

- [4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

**Note: Statement must be completed by an individual with managerial and/or supervisory capacity.**

|                    |           |                      |          |
|--------------------|-----------|----------------------|----------|
| Brian Maiorino     |           | Regulatory Analyst   | 12/17/13 |
| Print or Type Name | Signature | Title                | Date     |
|                    |           | bmaiorino@concho.com |          |
|                    |           | e-mail Address       |          |



RECEIVED OGD

2013 DEC 23 P 2: 51

December 18, 2013

New Mexico Oil Conservation Division  
David Brooks  
1220 S St. Francis Drive  
Santa Fe, New Mexico 87505

Re: Running Buffalo 1 Federal Com 1H NSP

Mr. Brooks,

COG Operating LLC respectfully requests approval of a non-standard project area for the Running Buffalo 1 Federal Com 1H.

SHL: UL I, Section 1, Township 21S, Range 28E, 1980' FSL 1090' FEL

BHL: Lot 1, Section 1, Township 21S, Range 28E, 330' FNL 380' FEL

API #: 30-015-41538

This project area is requested due to the irregular acreage of section 1 and because COG's lease does not cover a standard project area when drilling horizontally in a north/south orientation.

MRC Permian Company owns 100% of the offset tract and has been sent notification, certified mail # 91 7199 9991 7030 0486 1799.

Please contact me at 432-221-0467 should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "B. Maiorino".

Brian Maiorino  
Regulatory Analyst  
COG Operating, LLC

**District I**  
1625 N. French Dr., Hobbs, NM 88240

**District II**  
1301 W. Grand Avenue, Artesia, NM 88210

**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410

**District IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-102  
Revised October 15, 2009  
Submit one copy to appropriate  
District Office

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

|                                         |                                                             |                                                             |
|-----------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|
| <sup>1</sup> API Number<br>30-015-41538 | <sup>2</sup> Pool Code<br>97995                             | <sup>3</sup> Pool Name<br>WC-015 G-05 S202935P; Bone Spring |
| <sup>4</sup> Property Code<br>40010     | <sup>5</sup> Property Name<br>RUNNING BUFFALO 1 FEDERAL COM | <sup>6</sup> Well Number<br>1H                              |
| <sup>7</sup> OGRID No.<br>229137        | <sup>8</sup> Operator Name<br>COG OPERATING, LLC            | <sup>9</sup> Elevation<br>3448.9                            |

<sup>10</sup> Surface Location

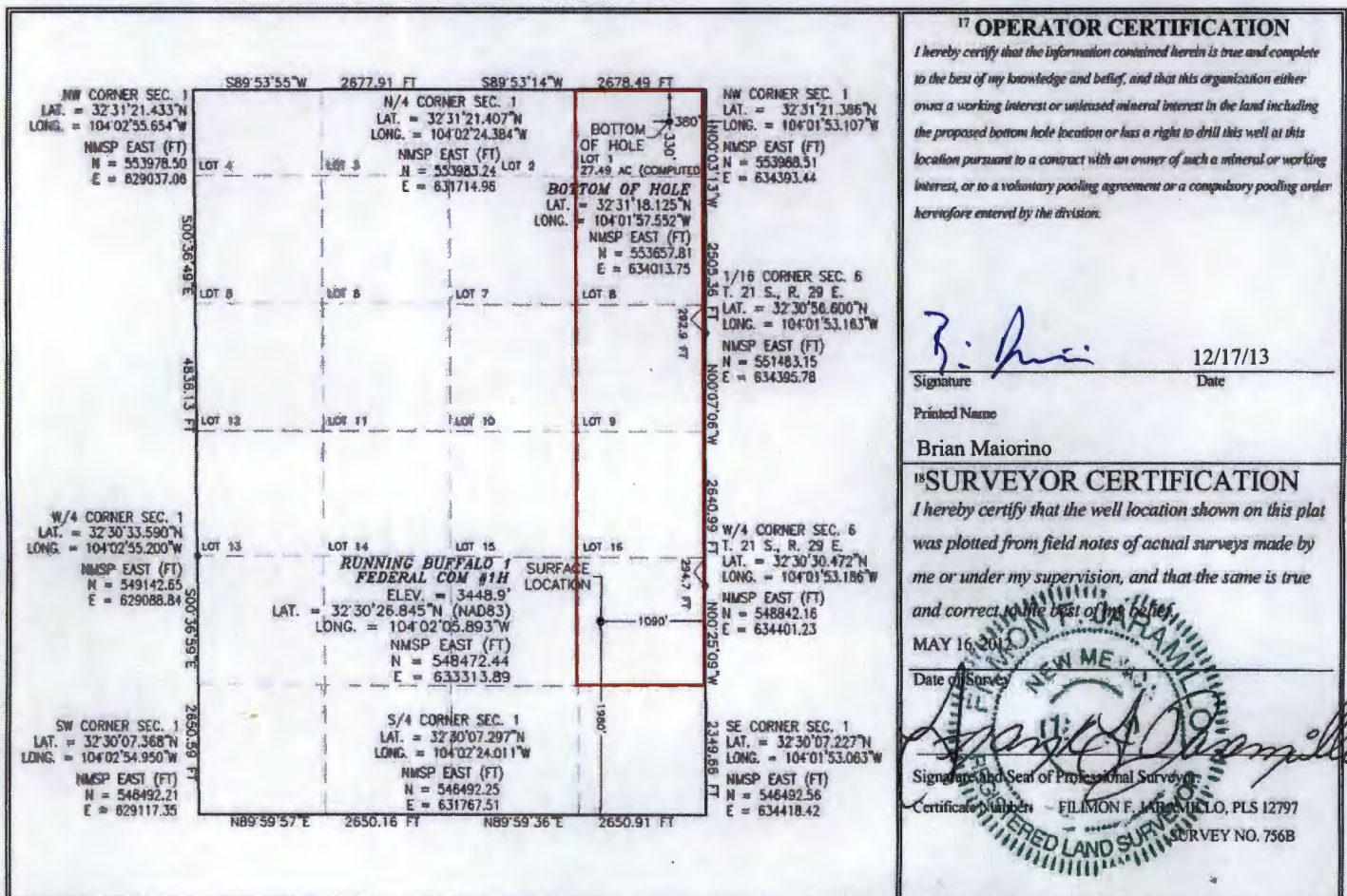
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| I             | 1       | 21 S     | 28 E  |         | 1980          | SOUTH            | 1090          | EAST           | EDDY   |

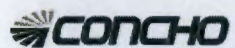
<sup>11</sup> Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| 1             | 1       | 21 S     | 28 E  |         | 330           | NORTH            | 380           | EAST           | EDDY   |

|                                         |                               |                                  |                         |
|-----------------------------------------|-------------------------------|----------------------------------|-------------------------|
| <sup>12</sup> Dedicated Acres<br>187.18 | <sup>13</sup> Joint or Infill | <sup>14</sup> Consolidation Code | <sup>15</sup> Order No. |
|-----------------------------------------|-------------------------------|----------------------------------|-------------------------|

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.





Legend

COG\_Acreage (RT)





COG Running Buffalo 1 Federal COM #1H Rev0 MDT 12Mar13 Proposal  
Geodetic Report  
(Def Plan)

**PATHFINDER**  
A Schlumberger Company

Report Date: March 15, 2013 - 03:15 PM  
Client: COG  
Field: NM Eddy County (NAD 83)  
Structure / Slot: COG Running Buffalo 1 Federal COM #1H / COG Running Buffalo 1 Federal COM #1H  
Well: COG Running Buffalo 1 Federal COM #1H  
Borehole: Original Borehole  
UWI / API#: Unknown / Unknown  
Survey Name: COG Running Buffalo 1 Federal COM #1H Rev0 MDT 12Mar13  
Survey Date: March 12, 2013  
Test / AHD / DDI / ERD Ratio: 90.803' / 5232.822 ft / 5.875 / 0.604  
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet  
Location Lat / Long: N 32° 30' 26.84562", W 104° 2' 5.89011"  
Location Grid N/E Y/X: N 548472.440 NUS, E 633313.890 NUS  
CRS Grid Convergence Angle: 0.1603°  
Grid Scale Factor: 0.99991878

Survey / DLS Computation: Minimum Curvature / Lubinski  
Vertical Section Azimuth: 6.589° (Grid North)  
Vertical Section Origin: 0.000 ft, 0.000 ft  
TVD Reference Datum: RKB  
TVD Reference Elevation: 3486.900 ft above  
Seabed / Ground Elevation: 3448.900 ft above  
Magnetic Declination: 7.714°  
Total Gravity Field Strength: 969.1836 mgn (9.8 based)  
Total Magnetic Field Strength: 48535.916 nT  
Magnetic Dip Angle: 60.285°  
Declination Date: March 12, 2013  
Magnetic Declination Model: BGGM 2012  
North Reference: Grid North  
Grid Convergence Used: 0.1603°  
Total Corr Mag North→Grid North: 7.5539°  
Local Coord Referenced To: Structure Reference Point

| Comments | MD<br>(ft) | Incl<br>(°) | Azim Grid<br>(°) | TVD<br>(ft) | VSEC<br>(ft) | NS<br>(ft) | EW<br>(ft) | DLS<br>(°/100ft) | Northing<br>(ftUS) | Easting<br>(ftUS) | Latitude<br>(N/S ° ' ") | Longitude<br>(E/W ° ' ") |
|----------|------------|-------------|------------------|-------------|--------------|------------|------------|------------------|--------------------|-------------------|-------------------------|--------------------------|
| SHL      | 0.00       | 0.00        | 7.69             | 0.00        | 0.00         | 0.00       | 0.00       | N/A              | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 100.00     | 0.00        | 7.69             | 100.00      | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 200.00     | 0.00        | 7.69             | 200.00      | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 300.00     | 0.00        | 7.69             | 300.00      | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 400.00     | 0.00        | 7.69             | 400.00      | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 500.00     | 0.00        | 7.69             | 500.00      | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 600.00     | 0.00        | 7.69             | 600.00      | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 700.00     | 0.00        | 7.69             | 700.00      | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 800.00     | 0.00        | 7.69             | 800.00      | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 900.00     | 0.00        | 7.69             | 900.00      | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 1000.00    | 0.00        | 7.69             | 1000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 1100.00    | 0.00        | 7.69             | 1100.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 1200.00    | 0.00        | 7.69             | 1200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 1300.00    | 0.00        | 7.69             | 1300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 1400.00    | 0.00        | 7.69             | 1400.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 1500.00    | 0.00        | 7.69             | 1500.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 1600.00    | 0.00        | 7.69             | 1600.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 1700.00    | 0.00        | 7.69             | 1700.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 1800.00    | 0.00        | 7.69             | 1800.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 1900.00    | 0.00        | 7.69             | 1900.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 2000.00    | 0.00        | 7.69             | 2000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 2100.00    | 0.00        | 7.69             | 2100.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 2200.00    | 0.00        | 7.69             | 2200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 2300.00    | 0.00        | 7.69             | 2300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 2400.00    | 0.00        | 7.69             | 2400.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 2500.00    | 0.00        | 7.69             | 2500.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 2600.00    | 0.00        | 7.69             | 2600.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 2700.00    | 0.00        | 7.69             | 2700.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 2800.00    | 0.00        | 7.69             | 2800.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 2900.00    | 0.00        | 7.69             | 2900.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 3000.00    | 0.00        | 7.69             | 3000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 3100.00    | 0.00        | 7.69             | 3100.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 3200.00    | 0.00        | 7.69             | 3200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 3300.00    | 0.00        | 7.69             | 3300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 3400.00    | 0.00        | 7.69             | 3400.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 3500.00    | 0.00        | 7.69             | 3500.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 3600.00    | 0.00        | 7.69             | 3600.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 3700.00    | 0.00        | 7.69             | 3700.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 3800.00    | 0.00        | 7.69             | 3800.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 3900.00    | 0.00        | 7.69             | 3900.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 4000.00    | 0.00        | 7.69             | 4000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 4100.00    | 0.00        | 7.69             | 4100.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 4200.00    | 0.00        | 7.69             | 4200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 4300.00    | 0.00        | 7.69             | 4300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 4400.00    | 0.00        | 7.69             | 4400.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 4500.00    | 0.00        | 7.69             | 4500.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 4600.00    | 0.00        | 7.69             | 4600.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 4700.00    | 0.00        | 7.69             | 4700.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 4800.00    | 0.00        | 7.69             | 4800.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 4900.00    | 0.00        | 7.69             | 4900.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 5000.00    | 0.00        | 7.69             | 5000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 5100.00    | 0.00        | 7.69             | 5100.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 5200.00    | 0.00        | 7.69             | 5200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 5300.00    | 0.00        | 7.69             | 5300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 5400.00    | 0.00        | 7.69             | 5400.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 5500.00    | 0.00        | 7.69             | 5500.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 5600.00    | 0.00        | 7.69             | 5600.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 5700.00    | 0.00        | 7.69             | 5700.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 5800.00    | 0.00        | 7.69             | 5800.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 5900.00    | 0.00        | 7.69             | 5900.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 6000.00    | 0.00        | 7.69             | 6000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 6100.00    | 0.00        | 7.69             | 6100.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 6200.00    | 0.00        | 7.69             | 6200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|          | 6300.00    | 0.00        | 7.69             | 6300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |

| Comments                                         | MD<br>(ft) | Incl<br>(°) | Azim Grid<br>(°) | TVD<br>(ft) | VSEC<br>(ft) | NS<br>(ft) | EW<br>(ft) | DLS<br>(ft/100ft) | Northing<br>(ftUS) | Easting<br>(ftUS) | Latitude<br>(N/S ° ' ") | Longitude<br>(E/W ° ' ") |
|--------------------------------------------------|------------|-------------|------------------|-------------|--------------|------------|------------|-------------------|--------------------|-------------------|-------------------------|--------------------------|
|                                                  | 6400.00    | 0.00        | 7.69             | 6400.00     | 0.00         | 0.00       | 0.00       | 0.00              | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|                                                  | 6500.00    | 0.00        | 7.69             | 6500.00     | 0.00         | 0.00       | 0.00       | 0.00              | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|                                                  | 6600.00    | 0.00        | 7.69             | 6600.00     | 0.00         | 0.00       | 0.00       | 0.00              | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|                                                  | 6700.00    | 0.00        | 7.69             | 6700.00     | 0.00         | 0.00       | 0.00       | 0.00              | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|                                                  | 6800.00    | 0.00        | 7.69             | 6800.00     | 0.00         | 0.00       | 0.00       | 0.00              | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|                                                  | 6900.00    | 0.00        | 7.69             | 6900.00     | 0.00         | 0.00       | 0.00       | 0.00              | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|                                                  | 7000.00    | 0.00        | 7.69             | 7000.00     | 0.00         | 0.00       | 0.00       | 0.00              | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|                                                  | 7100.00    | 0.00        | 7.69             | 7100.00     | 0.00         | 0.00       | 0.00       | 0.00              | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|                                                  | 7200.00    | 0.00        | 7.69             | 7200.00     | 0.00         | 0.00       | 0.00       | 0.00              | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|                                                  | 7300.00    | 0.00        | 7.69             | 7300.00     | 0.00         | 0.00       | 0.00       | 0.00              | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|                                                  | 7400.00    | 0.00        | 7.69             | 7400.00     | 0.00         | 0.00       | 0.00       | 0.00              | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|                                                  | 7500.00    | 0.00        | 7.69             | 7500.00     | 0.00         | 0.00       | 0.00       | 0.00              | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|                                                  | 7600.00    | 0.00        | 7.69             | 7600.00     | 0.00         | 0.00       | 0.00       | 0.00              | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|                                                  | 7700.00    | 0.00        | 7.69             | 7700.00     | 0.00         | 0.00       | 0.00       | 0.00              | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|                                                  | 7800.00    | 0.00        | 7.69             | 7800.00     | 0.00         | 0.00       | 0.00       | 0.00              | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|                                                  | 7900.00    | 0.00        | 7.69             | 7900.00     | 0.00         | 0.00       | 0.00       | 0.00              | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|                                                  | 8000.00    | 0.00        | 7.69             | 8000.00     | 0.00         | 0.00       | 0.00       | 0.00              | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|                                                  | 8100.00    | 0.00        | 7.69             | 8100.00     | 0.00         | 0.00       | 0.00       | 0.00              | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
| KOP Build @<br>12"/100'                          | 8182.56    | 0.00        | 7.69             | 8182.56     | 0.00         | 0.00       | 0.00       | 0.00              | 548472.44          | 633313.89         | N 32 30 26.85           | W 104 2 5.89             |
|                                                  | 8200.00    | 2.09        | 7.69             | 8200.00     | 0.32         | 0.32       | 0.04       | 12.00             | 548472.76          | 633313.93         | N 32 30 26.85           | W 104 2 5.89             |
|                                                  | 8300.00    | 14.09       | 7.69             | 8298.82     | 14.37        | 14.24      | 1.92       | 12.00             | 548486.68          | 633315.81         | N 32 30 26.99           | W 104 2 5.87             |
|                                                  | 8400.00    | 26.09       | 7.69             | 8392.58     | 48.85        | 48.22      | 6.51       | 12.00             | 548520.86          | 633320.40         | N 32 30 27.32           | W 104 2 5.81             |
|                                                  | 8500.00    | 38.09       | 7.69             | 8477.13     | 101.68       | 100.78     | 13.80      | 12.00             | 548573.21          | 633327.49         | N 32 30 27.84           | W 104 2 5.73             |
|                                                  | 8600.00    | 50.09       | 7.69             | 8548.82     | 171.12       | 169.81     | 22.89      | 12.00             | 548642.04          | 633336.78         | N 32 30 28.52           | W 104 2 5.62             |
|                                                  | 8700.00    | 62.09       | 7.69             | 8604.50     | 253.95       | 251.71     | 33.97      | 12.00             | 548724.13          | 633347.86         | N 32 30 29.34           | W 104 2 5.49             |
|                                                  | 8800.00    | 74.09       | 7.69             | 8641.74     | 346.54       | 343.49     | 48.36      | 12.00             | 548815.90          | 633360.25         | N 32 30 30.24           | W 104 2 5.34             |
|                                                  | 8900.00    | 86.09       | 7.69             | 8658.92     | 444.85       | 440.93     | 59.51      | 12.00             | 548913.34          | 633373.40         | N 32 30 31.21           | W 104 2 5.18             |
| Landing Point                                    | 8937.59    | 90.60       | 7.69             | 8660.00     | 482.40       | 478.15     | 64.54      | 12.00             | 548950.55          | 633378.42         | N 32 30 31.58           | W 104 2 5.12             |
|                                                  | 9000.00    | 90.60       | 7.69             | 8659.34     | 544.80       | 540.01     | 72.88      | 0.00              | 549012.40          | 633386.77         | N 32 30 32.19           | W 104 2 5.02             |
|                                                  | 9100.00    | 90.60       | 7.69             | 8658.29     | 644.78       | 639.10     | 86.26      | 0.00              | 549111.49          | 633400.14         | N 32 30 33.17           | W 104 2 4.86             |
|                                                  | 9200.00    | 90.60       | 7.69             | 8657.24     | 744.76       | 738.20     | 99.83      | 0.00              | 549210.58          | 633413.51         | N 32 30 34.15           | W 104 2 4.70             |
|                                                  | 9300.00    | 90.60       | 7.69             | 8658.18     | 844.73       | 837.29     | 113.01     | 0.00              | 549309.66          | 633426.89         | N 32 30 35.13           | W 104 2 4.54             |
|                                                  | 9400.00    | 90.60       | 7.69             | 8655.13     | 944.71       | 936.39     | 126.38     | 0.00              | 549408.75          | 633440.26         | N 32 30 36.11           | W 104 2 4.38             |
|                                                  | 9500.00    | 90.60       | 7.69             | 8654.08     | 1044.69      | 1035.48    | 139.76     | 0.00              | 549507.84          | 633453.64         | N 32 30 37.09           | W 104 2 4.22             |
|                                                  | 9600.00    | 90.60       | 7.69             | 8653.03     | 1144.66      | 1134.58    | 153.13     | 0.00              | 549606.93          | 633467.01         | N 32 30 38.07           | W 104 2 4.06             |
|                                                  | 9700.00    | 90.60       | 7.69             | 8651.97     | 1244.64      | 1233.68    | 166.51     | 0.00              | 549706.01          | 633480.38         | N 32 30 39.05           | W 104 2 3.81             |
|                                                  | 9800.00    | 90.60       | 7.69             | 8650.92     | 1344.61      | 1332.77    | 179.88     | 0.00              | 549805.10          | 633493.76         | N 32 30 40.03           | W 104 2 3.75             |
|                                                  | 9900.00    | 90.60       | 7.69             | 8649.87     | 1444.59      | 1431.87    | 193.26     | 0.00              | 549904.04          | 633507.13         | N 32 30 41.01           | W 104 2 3.59             |
|                                                  | 10000.00   | 90.60       | 7.69             | 8648.82     | 1544.57      | 1530.96    | 206.63     | 0.00              | 550003.28          | 633520.50         | N 32 30 41.99           | W 104 2 3.43             |
|                                                  | 10100.00   | 90.60       | 7.69             | 8647.78     | 1644.54      | 1630.06    | 220.01     | 0.00              | 550102.36          | 633533.88         | N 32 30 42.97           | W 104 2 3.27             |
|                                                  | 10200.00   | 90.60       | 7.69             | 8646.71     | 1744.52      | 1729.16    | 233.38     | 0.00              | 550201.45          | 633547.25         | N 32 30 43.95           | W 104 2 3.11             |
|                                                  | 10300.00   | 90.60       | 7.69             | 8645.66     | 1844.50      | 1828.25    | 246.76     | 0.00              | 550300.54          | 633560.63         | N 32 30 44.93           | W 104 2 2.95             |
|                                                  | 10400.00   | 90.60       | 7.69             | 8644.61     | 1944.47      | 1927.35    | 260.13     | 0.00              | 550399.63          | 633574.00         | N 32 30 45.91           | W 104 2 2.79             |
|                                                  | 10500.00   | 90.60       | 7.69             | 8643.55     | 2044.45      | 2026.44    | 273.51     | 0.00              | 550498.72          | 633587.37         | N 32 30 46.89           | W 104 2 2.63             |
|                                                  | 10600.00   | 90.60       | 7.69             | 8642.50     | 2144.43      | 2125.54    | 286.88     | 0.00              | 550597.80          | 633600.75         | N 32 30 47.87           | W 104 2 2.47             |
|                                                  | 10700.00   | 90.60       | 7.69             | 8641.45     | 2244.40      | 2224.64    | 300.26     | 0.00              | 550696.89          | 633614.12         | N 32 30 48.85           | W 104 2 2.31             |
|                                                  | 10800.00   | 90.60       | 7.69             | 8640.40     | 2344.38      | 2323.73    | 313.63     | 0.00              | 550795.98          | 633627.49         | N 32 30 49.83           | W 104 2 2.15             |
|                                                  | 10900.00   | 90.60       | 7.69             | 8639.34     | 2444.36      | 2422.83    | 327.00     | 0.00              | 550895.07          | 633640.87         | N 32 30 50.81           | W 104 2 1.99             |
|                                                  | 11000.00   | 90.60       | 7.69             | 8638.29     | 2544.33      | 2521.92    | 340.38     | 0.00              | 550994.15          | 633654.24         | N 32 30 51.79           | W 104 2 1.83             |
|                                                  | 11100.00   | 90.60       | 7.69             | 8637.24     | 2644.31      | 2621.02    | 353.75     | 0.00              | 551093.24          | 633667.61         | N 32 30 52.77           | W 104 2 1.67             |
|                                                  | 11200.00   | 90.60       | 7.69             | 8636.19     | 2744.28      | 2720.12    | 367.13     | 0.00              | 551192.33          | 633680.99         | N 32 30 53.75           | W 104 2 1.51             |
|                                                  | 11300.00   | 90.60       | 7.69             | 8635.13     | 2844.26      | 2819.21    | 380.50     | 0.00              | 551291.42          | 633694.36         | N 32 30 54.73           | W 104 2 1.35             |
|                                                  | 11400.00   | 90.60       | 7.69             | 8634.08     | 2944.24      | 2918.31    | 393.88     | 0.00              | 551390.50          | 633707.74         | N 32 30 55.71           | W 104 2 1.19             |
|                                                  | 11500.00   | 90.60       | 7.69             | 8633.03     | 3044.21      | 3017.40    | 407.25     | 0.00              | 551489.59          | 633721.11         | N 32 30 56.69           | W 104 2 1.04             |
|                                                  | 11600.00   | 90.60       | 7.69             | 8631.98     | 3144.19      | 3116.50    | 420.63     | 0.00              | 551588.68          | 633734.48         | N 32 30 57.67           | W 104 2 0.88             |
|                                                  | 11700.00   | 90.60       | 7.69             | 8630.92     | 3244.17      | 3215.60    | 434.00     | 0.00              | 551687.77          | 633747.86         | N 32 30 58.65           | W 104 2 0.72             |
|                                                  | 11800.00   | 90.60       | 7.69             | 8629.87     | 3344.14      | 3314.69    | 447.38     | 0.00              | 551786.86          | 633761.23         | N 32 30 59.63           | W 104 2 0.56             |
|                                                  | 11900.00   | 90.60       | 7.69             | 8628.82     | 3444.12      | 3413.79    | 460.75     | 0.00              | 551885.94          | 633774.60         | N 32 31 0.61            | W 104 2 0.40             |
|                                                  | 12000.00   | 90.60       | 7.69             | 8627.77     | 3544.10      | 3512.88    | 474.13     | 0.00              | 551985.03          | 633787.98         | N 32 31 1.59            | W 104 2 0.24             |
|                                                  | 12100.00   | 90.60       | 7.69             | 8626.72     | 3644.07      | 3611.98    | 487.50     | 0.00              | 552084.12          | 633801.35         | N 32 31 2.57            | W 104 2 0.08             |
|                                                  | 12200.00   | 90.60       | 7.69             | 8625.68     | 3744.05      | 3711.08    | 500.88     | 0.00              | 552183.21          | 633814.73         | N 32 31 3.55            | W 104 1 59.92            |
|                                                  | 12300.00   | 90.60       | 7.69             | 8624.61     | 3844.03      | 3810.17    | 514.25     | 0.00              | 552282.29          | 633828.10         | N 32 31 4.53            | W 104 1 59.76            |
|                                                  | 12400.00   | 90.60       | 7.69             | 8623.56     | 3944.00      | 3909.27    | 527.63     | 0.00              | 552381.38          | 633841.47         | N 32 31 5.51            | W 104 1 59.60            |
|                                                  | 12500.00   | 90.60       | 7.69             | 8622.51     | 4043.98      | 4008.36    | 541.00     | 0.00              | 552480.47          | 633854.85         | N 32 31 6.49            | W 104 1 59.44            |
|                                                  | 12600.00   | 90.60       | 7.69             | 8621.45     | 4143.95      | 4107.46    | 554.38     | 0.00              | 552579.56          | 633868.22         | N 32 31 7.47            | W 104 1 59.28            |
|                                                  | 12700.00   | 90.60       | 7.69             | 8620.40     | 4243.93      | 4206.56    | 567.75     | 0.00              | 552678.65          | 633881.59         | N 32 31 8.45            | W 104 1 59.12            |
|                                                  | 12800.00   | 90.60       | 7.69             | 8619.35     | 4343.91      | 4305.65    | 581.13     | 0.00              | 552777.73          | 633894.97         | N 32 31 9.43            | W 104 1 58.96            |
|                                                  | 12900.00   | 90.60       | 7.69             | 8618.30     | 4443.88      | 4404.75    | 594.50     | 0.00              | 552876.82          | 633908.34         | N 32 31 10.41           | W 104 1 58.80            |
|                                                  | 13000.00   | 90.60       | 7.69             | 8617.24     | 4543.86      | 4503.84    | 607.88     | 0.00              | 552975.91          | 633921.71         | N 32 31 11.39           | W 104 1 58.64            |
|                                                  | 13100.00   | 90.60       | 7.69             | 8616.19     | 4643.84      | 4602.94    | 621.25     | 0.00              | 553075.00          | 633935.09         | N 32 31 12.37           | W 104 1 58.48            |
|                                                  | 13200.00   | 90.60       | 7.69             | 8615.14     | 4743.81      | 4702.03    | 634.63     | 0.00              | 553174.08          | 633948.46         | N 32 31 13.35           | W 104 1 58.32            |
|                                                  | 13300.00   | 90.60       | 7.69             | 8614.09     | 4843.79      | 4801.13    | 648.00     | 0.00              | 553273.17          | 633961.84         | N 32 31 14.33           | W 104 1 58.17            |
|                                                  | 13400.00   | 90.60       | 7.69             | 8613.03     | 4943.77      | 4900.23    | 661.37     | 0.00              | 553372.26          | 633975.21         | N 32 31 15.31           | W 104 1 58.01            |
|                                                  | 13500.00   | 90.60       | 7.69             | 8611.98     | 5043.74      | 4999.32    | 674.75     | 0.00              | 553471.35          | 633988.58         | N 32 31 16.29           | W 104 1 57.85            |
|                                                  | 13600.00   | 90.60       | 7.69             | 8610.93     | 5143.72      | 5098.42    | 688.12     | 0.00              | 553570.43          | 634001.96         | N 32 31 17.27           | W 104 1 57.69            |
| COG Running<br>Buffalo 1 Federal<br>Com #1H PBHL | 13688.18   | 90.60       | 7.69             | 8610.00     | 5231.88      | 5185.80    | 699.92     | 0.00              | 553657.81          | 634013.75         | N 32 31 18.14           | W 104 1 57.55            |

Survey Type: Def Plan

Survey Error Model: ISCWSA Rev 0 \*\*\* 3-D 95.000% Confidence 2.7955 sigma

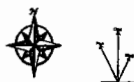
Survey Program:

| Description | MD From<br>(ft) | MD To<br>(ft) | EOU Freq<br>(ft) | Hole Size<br>(in) | Casing Diameter<br>(in) | Survey Tool Type | B |
|-------------|-----------------|---------------|------------------|-------------------|-------------------------|------------------|---|
|-------------|-----------------|---------------|------------------|-------------------|-------------------------|------------------|---|

| Comments | MD<br>(ft) | Incl<br>(°) | Azim Grid<br>(°) | TVD<br>(ft) | VSEC<br>(ft) | NS<br>(ft) | EW<br>(ft) | DLS<br>(°/100ft)       | Northing<br>(ftUS) | Easting<br>(ftUS) | Latitude<br>(N/S ° ' ")                                           | Longitude<br>(E/W ° ' ") |
|----------|------------|-------------|------------------|-------------|--------------|------------|------------|------------------------|--------------------|-------------------|-------------------------------------------------------------------|--------------------------|
|          |            | 0.000       | 18.000           |             | 1/100.000    | 30.000     | 30.000     | SLB_MWD-STD-Depth Only |                    |                   | Original Borehole / COG Running<br>Buffalo 1 Federal COM #1H Rev0 |                          |
|          |            | 18.000      | 13688.180        |             | 1/100.000    | 30.000     | 30.000     | SLB_MWD-STD            |                    |                   | Original Borehole / COG Running<br>Buffalo 1 Federal COM #1H Rev0 |                          |

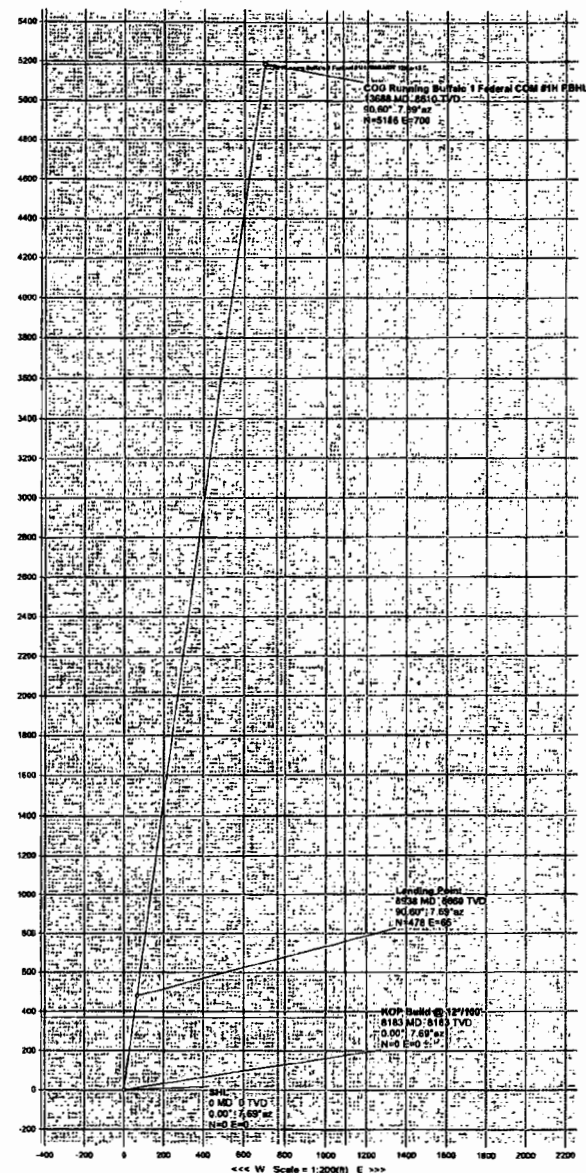
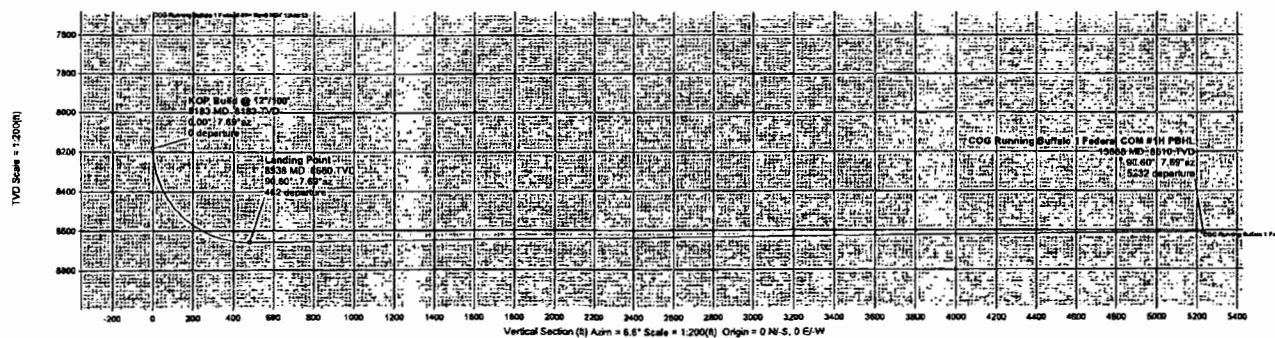


000 Keweenaw Island T Fishery COMMFW Lower Line  
000 Keweenaw Island T Fishery COMMFW Southern Line  
000 Keweenaw Island T Fishery COMMFW JWP Hardline  
000 Keweenaw Island T Fishery COMMFW JWP Pig-6  
000 Keweenaw Island T Fishery COMMFW Road MCT 12/16/13



Grid North  
Tot Corr (M->G  
7.5539°)  
Mag Dec (7.714°)  
Grid Conv (0.160°)

| Point                                      | Coordinate | Southings | Northings | Eastings | Westings | Altitude | SWH     | Longitude (deg) | Latitude (deg) | Longitude (deg) | Latitude (deg) | Altitude   | SWH       | Longitude (deg) | Latitude (deg) | Altitude | SWH  |
|--------------------------------------------|------------|-----------|-----------|----------|----------|----------|---------|-----------------|----------------|-----------------|----------------|------------|-----------|-----------------|----------------|----------|------|
| SHL                                        |            | 0.00      | 0.00      | 7.69     | 0.00     | -3466.90 | 0.00    | 0.00            | 0.00           | W 104 2 5.890   | N 32 30 26.847 | 633313.389 | 548472.44 | 0.00            | 0.00           |          | 7.69 |
| KOP Build @ 12°10'0"                       |            | 8182.56   | 0.00      | 7.69     | 8182.56  | 4715.66  | 0.00    | 0.00            | 0.00           | W 104 2 5.890   | N 32 30 26.847 | 633313.389 | 548472.44 | 0.00            | 0.00           | 0.00     | 7.69 |
| Landing Point                              |            | 8937.59   | 90.60     | 7.69     | 8960.00  | 5193.10  | 482.40  | 478.15          | 64.54          | W 104 2 5.121   | N 32 30 31.576 | 633378.42  | 548950.55 | 482.49          | 7.69           | 12.00    | 0.00 |
| COG Running Buffalo 1 Federal Com #1H PBHL |            | 13686.18  | 90.60     | 7.69     | 8610.00  | 5143.10  | 5231.88 | 5185.80         | 689.92         | W 104 1 57.546  | N 32 31 18.139 | 634013.75  | 535657.81 | 5232.82         | 7.69           |          | 0.00 |



Drawn By: \_\_\_\_\_  
 Date Created: \_\_\_\_\_  
 Checked By: \_\_\_\_\_  
 Checked Date: \_\_\_\_\_  
 Approved By: \_\_\_\_\_  
 Approved Date: \_\_\_\_\_

Current User: \_\_\_\_\_  
 March 18, 2013 02:45:28 PM

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

JUL 10 2013

NMOC D ARTESIA

12-630  
FORM APPROVED  
OMB No. 1004-0137  
Expires October 31, 2014

5. Lease Serial No.  
SHL: NMNM115407, BHL: NMNM115409

6. If Indian, Allottee or Tribe Name

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

8. Lease Name and Well No. **L400107**  
Running Buffalo 1 Federal Com #1H

9. API Well No.  
**30-015-41538**

10. Field and Pool, or Exploratory  
**WC-018 G-08 S202935P, BS**  
~~Wildcat Bone Spring~~  
**2979952**

11. Sec., T.R.M. or Blk and Survey or Area

Sec. 1 - T215 - R28E

12. County or Parish  
Eddy County

13. State  
NM

1a. Type of Work: ☒ DRILL ☐ REENTER

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

2. Name of Operator

COG Operating LLC.

3a. Address

2208 West Main Street  
Artesia, NM 88210

3b. Phone No. (include area code)

575-748-6940

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

At surface 1980' FSL & 1090' FEL Unit Letter I (NESE) SHL Sec 1-T215-R28E

At proposed prod. Zone 330' FNL & 380' FEL Lot #1 NENE BHL Sec 1-T215-R28E

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

Approximately 10 miles from Carlsbad

15. Distance from proposed\*

location to nearest  
property or lease line, ft.  
(Also to nearest drig. Unit line, if any)

330'

16. No. of acres in lease

SHL: 160

BHL: 294.31

17. Spacing Unit dedicated to this well

187.18

18. Distance from location\*

to nearest well, drilling, completed,  
applied for, on this lease, ft.

SHL: 890' BHL: 1312'

19. Proposed Depth

TVD: 8610' MD: 13,688'

NMB000740

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

**3451.7 GL 3448.9 per plat**

22. Approximate date work will start\*

When Approved

23. Estimated duration

30 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall 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 shall 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 authorized officer.

25. Signature

Title

Regulatory Analyst

Approved by (Signature)

**/s/George MacDonell**

Title

**FIELD MANAGER**

Name (Printed/Typed)

Mayte Reyes

Date

4/20/2012

Name (Printed/Typed)

Date

**JUL - 5 2013**

Office

**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.

**APPROVAL FOR TWO YEARS**

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)

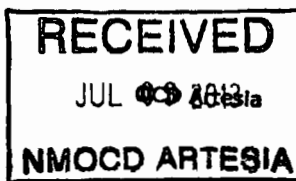
\*(Instructions on page 2)

**Capitan Controlled Water Basin**

**Approval Subject to General Requirements  
& Special Stipulations Attached**

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT



12-630  
FORM APPROVED  
OMB No. 1004-0137  
Expires October 31, 2014  
JUL 12 2013

APPLICATION FOR PERMIT TO DRILL OR REENTER

|                                                                                                                                                                                                                                                           |                                                        |                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER                                                                                                                                                              |                                                        | 5. Lease Serial No.<br>SHL: NMNM115407, BHL: NMNM115409                                                               |
| 1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone                                               |                                                        | 6. If Indian, Allottee or Tribe Name                                                                                  |
| 2. Name of Operator<br>COG Operating LLC.                                                                                                                                                                                                                 |                                                        | 7. If Unit or CA Agreement, Name and No.                                                                              |
| 3a. Address<br>2208 West Main Street<br>Artesia, NM 88210                                                                                                                                                                                                 |                                                        | 8. Lease Name and Well No. <b>L400107</b><br>Running Buffalo 1 Federal Com #1H                                        |
| 3b. Phone No. (include area code)<br>575-748-6940                                                                                                                                                                                                         |                                                        | 9. API Well No.<br><b>30-015-41538</b>                                                                                |
| 4. Location of Well (Report location clearly and in accordance with any State requirements. *)<br>At surface 1980' FSL & 1090' FEL Unit Letter I (NESE) SHL Sec 1-T21S-R28E<br>At proposed prod. Zone 330' FNL & 380' FEL Lot #1 NENE BHL Sec 1-T21S-R28E |                                                        | 10. Field and Pool, or Exploratory<br><b>WC-015 G-08 SZ02935P; BS</b><br><b>Wildcat Bone Spring</b><br><b>2979952</b> |
| 14. Distance in miles and direction from nearest town or post office*<br>Approximately 10 miles from Carlsbad                                                                                                                                             |                                                        | 11. Sec., T.R.M. or Blk and Survey or Area<br>Sec. 1 - T21S - R28E                                                    |
| 15. Distance from proposed* location to nearest property or lease line, ft.<br>(Also to nearest drig. Unit line, if any) 330'                                                                                                                             | 16. No. of acres in lease<br>SHL: 160<br>BHL: 294.31   | 17. Spacing Unit dedicated to this well<br>187.18                                                                     |
| 18. Distance from location* to nearest well, drilling, completed, applied for, on this lease, ft.<br>SHL: 890' BHL: 1312'                                                                                                                                 | 19. Proposed Depth<br>TVD: 8610' MD: 13,688'           | NMB000740                                                                                                             |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.)<br><b>3451.7 GL 3448.9 per plat</b>                                                                                                                                                                   | 22. Approximate date work will start*<br>When Approved | 23. Estimated duration<br>30 days                                                                                     |

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- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

|                                                       |                                     |                             |
|-------------------------------------------------------|-------------------------------------|-----------------------------|
| 25. Signature<br><i>Mayte Reyes</i>                   | Name (Printed/Typed)<br>Mayte Reyes | Date<br>4/20/2012           |
| Title<br>Regulatory Analyst                           |                                     |                             |
| Approved by (Signature)<br><b>/s/George MacDonell</b> | Name (Printed/Typed)                | Date<br><b>JUL - 5 2013</b> |
| Title<br><b>FIELD MANAGER</b>                         |                                     |                             |
| Office<br><b>CARLSBAD FIELD OFFICE</b>                |                                     |                             |

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Conditions of approval, if any, are attached.

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(Continued on page 2)

\*(Instructions on page 2)

Capitan Controlled Water Basin

Approval Subject to General Requirements  
& Special Stipulations Attached

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL



December 17, 2013

To: MRC Permian Company  
5400 LBJ Freeway STE 1500  
Dallas, TX 75240

Re: Designation of a Non-Standard Project area by CO  
Eddy County, New Mexico

Ladies and Gentlemen:

This letter is to advise you that COG Operating LLC has  
Acreage Plat (C-102) with the New Mexico Oil Conservation D  
project area in Section 1, Township 21 South, Range 28 East, E

As an owner of an interest that may be affected by th  
have an objection to this application, it must be mailed to CO  
from the date this notice is received. If no objection within th  
the application.

If you have any questions or concerns, please feel free to contact me at (432)-221-0467.

Sincerely,

Brian Maiorino  
Regulatory Analyst  
Operations and Engineering

| SENDER: COMPLETE THIS SECTION                                                                                                                                                                                                                                                                                                           |  | COMPLETE THIS SECTION ON DELIVERY                                                                                                                                                                                                                                                   |                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| <input type="checkbox"/> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.<br><input type="checkbox"/> Print your name and address on the reverse so that we can return the card to you.<br><input type="checkbox"/> Attach this card to the back of the mailpiece, or on the front if space permits. |  | A. Signature<br><b>X</b>                                                                                                                                                                                                                                                            | <input type="checkbox"/> Agent<br><input type="checkbox"/> Addressee |
| 1. Article Addressed to:<br><br>MRC Permian Company<br>5400 LBJ Freeway STE 1500<br>Dallas, TX 75240                                                                                                                                                                                                                                    |  | B. Received by (Printed Name)                                                                                                                                                                                                                                                       | C. Date of Delivery                                                  |
|                                                                                                                                                                                                                                                                                                                                         |  | D. Is delivery address different from item 1? <input type="checkbox"/> Yes<br>If YES, enter delivery address below:                                                                                                                                                                 |                                                                      |
|                                                                                                                                                                                                                                                                                                                                         |  | 3. Service Type<br><input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail<br><input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise<br><input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D. |                                                                      |
|                                                                                                                                                                                                                                                                                                                                         |  | 4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes                                                                                                                                                                                                                    |                                                                      |

91 7199 9991 7030 0406 1799

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

## McMillan, Michael, EMNRD

---

**From:** Brian Maiorino <BMaiorino@concho.com>  
**Sent:** Monday, January 06, 2014 12:40 PM  
**To:** McMillan, Michael, EMNRD  
**Cc:** Goetze, Phillip, EMNRD  
**Subject:** RE: Running Buffalo 1 federal Com 1H Eddy county

Michael, penetration point for the Running Buffalo 1 Fed Com 1H will be 2458' FSL 1025' FEL. I believe that would make it a standard location. Please let me know if anything else is needed.

Thanks!

**Brian Maiorino**  
Regulatory Analyst  
Operations & Engineering

COG Operations LLC  
One Concho Center  
600 W. Illinois Avenue  
Midland, TX 79701  
432-221-0467  
[bmaiorino@concho.com](mailto:bmaiorino@concho.com)



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**From:** McMillan, Michael, EMNRD [<mailto:Michael.McMillan@state.nm.us>]  
**Sent:** Tuesday, December 24, 2013 12:27 PM  
**To:** Brian Maiorino  
**Cc:** Goetze, Phillip, EMNRD  
**Subject:** Running Buffalo 1 federal Com 1H Eddy county

Mr. Maiorino:

I received an administrative approval request for a NSP for the Running Buffalo 1 federal Com 1H Section 1 T21S R28E. Please provide penetration point, because based on preliminary information the well would also require a NSL application.

## Michael A. McMillan

Engineering and Geological Services Bureau, Oil conservation Division  
1220 South St. Francis Dr., Santa Fe NM 87505  
O: 505.476.3448 F. 505.476.3462

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