

4/30/2015 DATE IN	SUSPENSE	MAM ENGINEER	4/30/2015 LOGGED IN	NSP NSL DHC TYPE	PMAM 1512048540 PMAM 151204848L PMAM 151204868L APP NO.
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*Need C-100K
- notification of
section 30.*

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

[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.

John Austin Akers Print or Type Name	_____ Signature	VP of Land Title	4/30/2015 Date
		akers@logosresourcesllc.com e-mail Address	

- NSL 7286
- NSP 2031
- DHC 4767
- LOGOS OPERATING, LLC
285408
- WEL
- BRANNOY Federal #285
30-015-35645
2015 APR 30 P 1:21
RECEIVED OGD
P001
- BASIN MANCOS
97232
- Whitewash mancos
DAKOTAG
64290

DISTRICT I
1600 N. French Dr., Hobbs, N.M. 88240
Phone: (505) 528-6181 Fax: (505) 528-6788

DISTRICT II
611 S. First St., Artesia, N.M. 88218
Phone: (505) 748-1288 Fax: (505) 748-8788

DISTRICT III
1600 N. French Dr., Hobbs, N.M. 88240
Phone: (505) 528-6181 Fax: (505) 528-6788

DISTRICT IV
1600 N. French Dr., Santa Fe, N.M. 87505
Phone: (505) 476-6686 Fax: (505) 476-6686

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 August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-35645	² Pool Code 84290 / 97232	³ Pool Name WHITE WASH MANCOS DAKOTA / BASIN MANCOS
⁴ Property Code 314773	⁵ Property Name BRANNON FEDERAL	⁶ Well Number 292H
⁷ OGED No. 289408	⁸ Operator Name LOGOS OPERATING, LLC	⁹ Elevation 8680'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot	Feet from the	North/South line	Feet from the	East/West line	County
E	28	25-N	9-W	1824	1824	NORTH	300	WEST	SAN JUAN

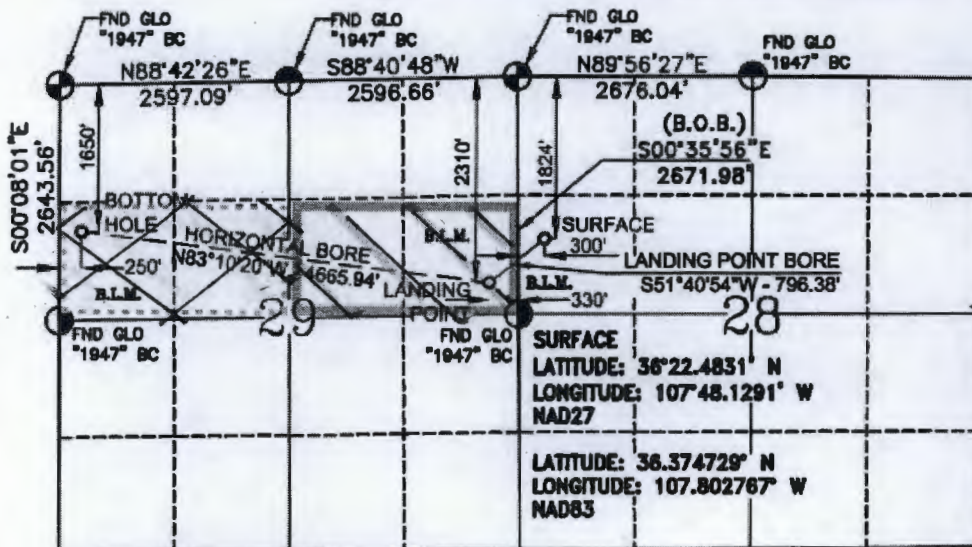
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot	Feet from the	North/South line	Feet from the	East/West line	County
E	29	25-N	9-W	1650	1650	NORTH	250	WEST	SAN JUAN

¹² Dedicated Acres WW MN S/2NE/4 80 acres Basin MN S/2NW/4 80 acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or a 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 a mineral or a working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: *Tamra Sessions* Date: *4-30-15*
Printed Name: Tamra Sessions
E-mail Address: tsessions@logosresourcesllc.com

18 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.

SEPTEMBER 17, 2014

Date of Survey

Signature and Seal of



GLEN W. RUSSELL

Certificate Number

15703

☒ Basin Mancos

☒ White Wash Mancos Dakota

BOTTOM HOLE

LATITUDE: 36°22.4932' N
LONGITUDE: 107°49.2002' W
NAD27

LATITUDE: 36.374897° N
LONGITUDE: 107.820620° W
NAD83

LANDING POINT

LATITUDE: 36°22.4018' N
LONGITUDE: 107°48.2564' W
NAD27

LATITUDE: 36.373374° N
LONGITUDE: 107.804589° W
NAD83

BASIS OF BEARING:

BETWEEN FOUND MONUMENTS AT THE NORTHEAST CORNER AND THE EAST QUARTER CORNER OF SECTION 29, TOWNSHIP 25 NORTH, RANGE 9 WEST, N.M.P.M. SAN JUAN COUNTY, NEW MEXICO.

LINE BEARS: S 00°35'56" E A DISTANCE OF 2671.98 FEET AS MEASURED BY G.P.S. LOCAL GRID NAD83.





Main office: 4001 N. Butler Ave. Bldg 7101
Farmington, NM 87401
Phone: (505) 436-2626

Nashville office: 110 30th Ave. North, Suite 4
Nashville TN, 37203
Phone: (615) 523-2661

April 30, 2015

David Catanach
New Mexico Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

Sent Via Priority Mail

**Re: Logos Operating, LLC
Request for Administrative Approval
Unorthodox Well Location & Unorthodox Spacing Unit
Brannon Federal 292H
API No. - 3004535645
Surface Location-1824' FNL, 300' FWL
SW/4NW/4 Section 28, T25N, R9W**

Dear Mr. Catanach,

On behalf of Logos Operating, LLC ("Logos") and pursuant to Division Rules governing the spacing for wells drilled in the Basin Mancos Pool and the White Wash Mancos Pool, we request administrative approval an unorthodox well location and spacing unit for the Brannon Federal 292H to be located at an unorthodox location as follows:

Surface location:	1824' FNL, 300' FWL	(SWNW Section 28)
Initial Casing Point:	2310' FNL, 330' FEL	(SENE Section 29)
End Casing Point ¹ :	1650' FNL, 250' FWL	(SWNW Section 29)

The pool rules for the Basin Mancos Gas Pool provide that wells shall be drilled in a 320 acre spacing unit (stand up of lay down) and not closer than 660' to any exterior boundary of the 320 acre stand up or lay down spacing unit. Pool rules for the White Wash Mancos Pool provide that wells shall be drilled in a 40 acre spacing unit and not closer than 330' to any exterior boundary of the 40 acre spacing unit.

The spacing unit for this well is rendered unorthodox by the fact that the frozen White Wash Mancos pool covers the S/2NE/4 of Section 29. Therefore, we are unable to form a full 320 acre laydown unit for the well. Furthermore, because the White Wash Mancos pool is frozen, we cannot form a spacing unit with 40 acre laterally penetrated units. As such we propose that a 160 acre non-standard laydown spacing unit be established covering the S/2N/2 of Section 29, T25N, R9W, NMPM, that will include both pools as they are currently established (Basin Mancos (S2NW, White Wash Mancos

¹ Note that the last perforation in the well will be at least 330' from the west line despite the end casing point being 250' from the west line.

S2NE). LOGOS will submit a downhole commingle application to allocate production by pool acreage within the spacing unit.

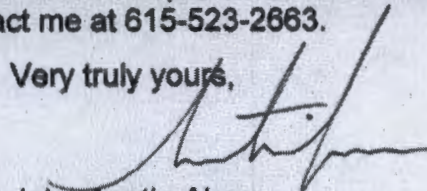
Furthermore, The location proposed for this well is unorthodox by approximately 330' to the west and north where Basin Mancos pool rules require 660' setbacks (LOGOS proposes a 330' setback from the last perforation in the cemented lateral portion of the Brannon Federal 292H well).

Logos seeks an exception from the applicable well location rules for the following reasons: Per current industry best practices and understanding of reservoir drainage of the Gallup sandstone in this area, the efficient development of the resources in the Gallup/Mancos formation underlying LOGOS BLM Lease SF 078309 requires the development of the Mancos interval with 330' setbacks from spacing unit boundaries in order to avoid waste and inefficient development. Furthermore, the NSP is requested at the direction of the commission in order to accurately allocate production between the two pools.

LOGOS has provided notice of this unorthodox location to all affected parties as well as to the Farmington BLM office as of April 30, 2015.

Thank you for your consideration of this request. Should more information be required, please do not hesitate to contact me at 615-523-2663.

Very truly yours,



John Austin Akers
Vice President of Land

Enclosures:

Lease Map

Exhibit A - Affected parties

Exhibit B - APD

Exhibit C - C-102

Administrative Application Checklist

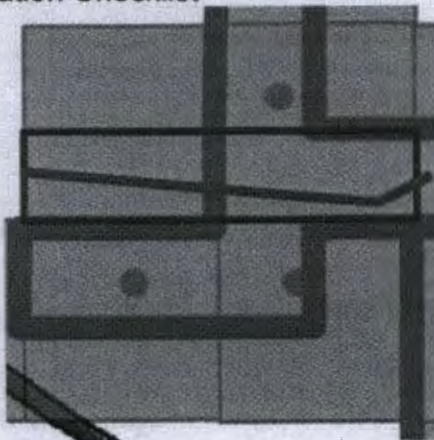


EXHIBIT "A"

Affected Parties

- Merrion Oil & Gas (100% interest in Mancos- Section 28 All and Section 29 All S/2)- Mail Sent 4/30/2015
- EnerVest Operating, LLC (Operator of the Mancos Formation in the NW/4 of Section 30)- Mail Sent 4/30/2015
- BLM (Courtesy notice)- Mail Sent 4/30/2015



4001 N. Butler Blvd. Bldg 7101
Farmington, NM 87401
Phone: (505) 436-2626
Fax: (303) 974-1767

April 30, 2015

NMOCD- Santa Fe Office
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Sent Via US Priority Mail

**Re: Logos Operating, LLC
Downhole Comingling Application Notice
Brannon Federal 292H well
API No. – 30-045-35645
1824' FNL and 300' FWL (Surface)
SW/4NW/4 Section 28, T25N, R9W
1650' FNL and 250' FWL (Bottom)
SW/4NW/4 Section 29, T25N, R9W
San Juan County, New Mexico**

To whom it may concern:

Enclosed please find a C-107A application and associated documents for the Brannon Federal 292H well. This application requests commingling of the following two pools:

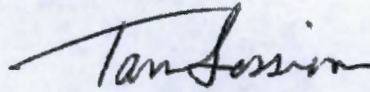
- White Wash Mancos-Dakota (Pool Code 64290)- Oil
- Basin Mancos (Pool Code 97232)- Oil

This downhole comingling application is for one horizontal well to be drilled through one formation that is administratively divided between two pools covering the same Mancos formation (the White Wash Mancos and the Basin Mancos). Pending approval of a non-standard spacing unit application, the spacing unit for the well will be the S/2N/2 of Section 29 of T25N, R9W. Both pools are estimated to have the exact same oil gravity, gas btu, water rates, and bottomhole pressures which will be determined upon the drilling of the well. The S/2NW/4 of Section 29 is considered Basin Mancos by the OCD, and the S/2NE/4 is considered White Wash by the OCD. As such, LOGOS proposes that there be a fixed allocation between the two pools based on the % of the spacing unit they cover. Based on this methodology, the White Wash Mancos is proposed to have 50% allocated to it with the Basin Mancos having 50% of production allocated to it.

The Federal government owns 100% minerals in all depths in this well and has been notified of this application. All ownership is uniform across all depths. Please refer to the NSL/NSP application for Unorthodox Well Location and Unorthodox Spacing Unit.

Should you have any concerns regarding this application please contact me at 505-436-2606 or tsessions@logosresourcesllc.com

Very truly yours,

A handwritten signature in black ink, appearing to read "Tamra Sessions". The signature is fluid and cursive, with a long horizontal stroke extending to the left.

Tamra Sessions
Operations Technician
Enclosures: C107A application

District I
1635 N. French Drive, Hobbs, NM 88240

District II
811 S. First St., Artesia, NM 88210

District III
1000 Rio Grande Road, Aztec, NM 87410

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Form C-107A
Revised August 1, 2011

APPLICATION TYPE
☒ Single Well
☐ Establish Pre-Approved Pools
EXISTING WELLBORE
☐ Yes ☒ No

APPLICATION FOR DOWNHOLE COMMINGLING

Logos Operating, LLC

4001 North Butler, Building 7101, Farmington, NM 87401

Operator **Brannon Federal** Address **292H Sec 28, T25N, R09W** San Juan
Lease Well No. Unit Letter-Section-Township-Range County
OGRID No. 289408 Property Code 314773 API No. 30-045-35645 Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	Units E,F	Units G,H	
Pool Name	Basin Mancos	White Wash Mancos Dakota	
Pool Code	97232	64290	
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	Top of Mancos formation -5493' TVD to Base -5597'	Top of Mancos formation -5493' TVD to Base -5597'	Note: This Commingling Application is to commingle two pools in the same formation. This will be a horizontal well bore and the entire producing lateral will be +/-5570' TVD and +/- 4664' Lateral Horizontal Length.
Method of Production (Flowing or Artificial Lift)			
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	+/- 2609 psi	+/- 2609 psi	
Oil Gravity or Gas BTU (Degree API or Gas BTU)	Limited test data available at this time. See attached letter.		
Producing, Shut-In or New Zone	New Zone	New Zone	
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: Limited test data available at this time. See attached letter. Rates:		
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas 50 % 50 %	Oil Gas 50 % 50 %	Oil Gas % %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes ☒ No ☐
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes ☐ No ☐
Are all produced fluids from all commingled zones compatible with each other? Yes ☒ No ☐
Will commingling decrease the value of production? Yes ☐ No ☒
If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands
or the United States Bureau of Land Management been notified in writing of this application? Yes ☒ No ☐
NMOCD Reference Case No. applicable to this well: _____

Attachments:

C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
Production curve for each zone for at least one year. (If not available, attach explanation.)
For zones with no production history, estimated production rates and supporting data.
Data to support allocation method or formula.
Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

List of other orders approving downhole commingling within the proposed Pre-Approved Pools
List of all operators within the proposed Pre-Approved Pools
Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
Bottomhole pressure data.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Tamra Sessions TITLE Operations Technician DATE 4-30-15

TYPE OR PRINT NAME Tamra Sessions TELEPHONE NO. (505) 436-2606

E-MAIL ADDRESS tsessions@logosresourcesllc.com

(EX 15)

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary-Designate

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

David R. Catanach Division Director
Oil Conservation Division



New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-3 APD form.

Operator Signature Date: 2-5-15

Well information:

Operator Logos, Well Name and Number Brannon Federal #292 H

API# 30-045-35645, Section 28, Township 25 N/S, Range 9 E/W

Conditions of Approval:

(See the below checked and handwritten conditions)

- ☒ Notify Aztec OCD 24hrs prior to casing & cement.
- ☒ Hold C-104 for directional survey & "As Drilled" Plat
- ☒ Hold C-104 for NSL NSP DHC
- ☐ Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned
- ☐ Regarding the use of a pit, closed loop system or below grade tank, the operator must comply with the following as applicable:
 - A pit requires a complete C-144 be submitted and approved prior to the construction or use of the pit, pursuant to 19.15.17.8.A
 - A closed loop system requires notification prior to use, pursuant to 19.15.17.9.A
 - A below grade tank requires a registration be filed prior to the construction or use of the below grade tank, pursuant to 19.15.17.8.C
- ☐ 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
- ☒ Regarding Hydraulic Fracturing, review EPA Underground Injection Control Guidance 84
- ☒ 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.
- ☒ Well-bore communication is regulated under 19.15.29 NMAC. This requires well-bore Communication to be reported in accordance with 19.15.29.8.

Handwritten signature of David R. Catanach.

NMOCD Approved by Signature

4-24-2015
Date KC

APR 21 2015

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014FEB 06 2015
Serial No.
SF 078309

APPLICATION FOR PERMIT TO DRILL OR REENTER

Farmington Field Office
Bureau of Land Management
Allottee or Tribe Name

1a. Type of work: ☒ DRILL ☐ REENTER		7. If Unit or CA Agreement, Name and No.
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		8. Lease Name and Well No. Brannon Federal 292H
2. Name of Operator Logos Operating, LLC		9. API Well No. 30-045-35645
3a. Address 4001 North Butler Ave, Building 7101 Farmington, NM 87401	3b. Phone No. (include area code) 505-330-9333	10. Field and Pool, or Exploratory Basin MN / White Wash MN-DK
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 1824' FNL 300' FWL, SW/NW At proposed prod. zone 1850' FNL 250' FWL, SW/NW		11. Sec., T. R. M. or Blk. and Survey or Area SHL Sec 28, T25N R09W, UL E BHL Sec 29, T25N R09W, UL E
14. Distance in miles and direction from nearest town or post office* 8.2 miles northwest of Nageezi		12. County or Parish San Juan
15. Distance from proposed* location to nearest property or lease line, ft. 21 (Also to nearest drig. unit line, if any)		13. State NM
16. No. of acres in lease 2521.02 acres	17. Spacing Unit dedicated to this well N/2 Sec 29 = 320 acres	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 390' from Federal 28 2	19. Proposed Depth 10728' MD / 5545' TVD	20. BLM/BIA Bond No. on file BLM 1062415 NMB 000917
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6680' GL	22. Approximate date work will start* 05/15/2015	23. Estimated duration 45 days

24. Attachments

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

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature <i>Tamra Sessions</i>	Name (Printed/Typed) Tamra Sessions	Date 02/05/2015
-------------------------------------	--	--------------------

Title

Operations Technician

Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) AFM	Date 4/16/15
--	-----------------------------	-----------------

Title

Office

FFO

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

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

(Continued on page 2)

*(Instructions on page 2)

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

DRILLING OPERATIONS AUTHORIZED
ARE SUBJECT TO COMPLIANCE WITH
ATTACHED "GENERAL REQUIREMENTS"

CONFIDENTIAL

This action is subject to
technical and procedural review
pursuant to 43 CFR 3165.3 and
appeal pursuant to 43 CFR 3165.4

NMOC

**Attachment To Application For Permit To Drill
Drilling Program**

LOGOS OPERATING, LLC
4001 N. Butler, Bldg. 7101
Farmington, NM 87401
U.S.A

BRANNON FEDERAL 292H
Horizontal Gallup Oil and Gas Well
Surface Location: 1824' FNL - 300' FWL
Section 28, T25N, R9W
Ungraded GL Elev = 6680'
Estimate KB Elev = 6695' (15'KB)
Lat. = 36.374729 deg N
Long. = 107.802767 deg W
NAD83
San Juan County, New Mexico

Proposed Bottom Hole Location: 1650' FNL - 250' FWL
Section 29, T25N, R9W
San Juan County, New Mexico

Drilling program written in compliance with Onshore Oil and Gas Order No. 1
(III.D.3, effective May 2007) and Onshore Order No. 2 Dated November 18, 1988

1. ESTIMATED TOPS FOR IMPORTANT GEOLOGICAL FORMATIONS

<u>Formation Tops</u>	<u>Surface (TVD)</u>
Ojo Alamo	998
Kirtland	1154
Fruitland	1453
Pictured Cliffs	1854
Chacra	1940
Cliff House	3400
Menefee	3413
Point Lookout	4251
Mancos	4516
Gallup	5139
Lower Gallup	5493
Landing Point	5575
Total Depth	5545

Drilling Plan

Drill 12 1/4" hole to 320' then set 9 5/8" casing. Drill 8 3/4" hole with fresh water mud from 320' MD to kick off point 4591' MD.

Trip out of hole and pick up 8 3/4" kick off assembly at 4591' MD. Build angle at 9 deg/100' to 85 degrees inclination and 276.83 degrees azimuth in the Gallup formation at 5214' MD/ 5139' TVD where 7" intermediate casing will be set at 6064' MD / 5571' TVD.

7" casing will be set in a legal position 2310' FNL & 330' FEL in Section 29.

The 7" casing will be drilled out with a 6 1/8" drilling assembly building angle at 5 deg/100' to 90.38 degrees inclination and 276.83 degree azimuth to 6171' MD/ 5575' TVD. Hold 90.38 degrees, 276.83 degrees azimuth and drill to a total depth at 10728' MD/ 5545' TVD. Adjustments may be made to the directional program based on geology. Total depth will be 10728' MD/ 5545' TVD - 90.38 degrees, 276.83 degrees Azimuth.

The Bottom hole location will be in a legal location at 10728' MD at 1650' FNL & 250' FWL of section 29.
A total of 4664' of horizontal hole will be drilled.

2. ANTICIPATED DEPTHS OF PROSPECTIVE OIL GAS AND OTHER HYDROCARBONS

Primary objective is the Gallup formation encountered first at 5139' TVD See formation listings in #1 above for additional zones of interest.

3. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL EQUIPMENT

BOP equipment and accessories will meet or exceed BLM requirements outlined in 43 CFR Part 3160.

A 2000 psig double ram hydraulic BOP will be used (see attached diagram). Since maximum anticipated formation pressure is 2029 psig (0.364 psi/ft @ 5575' TVD), accessories to the BOP will meet BLM requirements for a 2000 psig system. In accordance with Onshore Order #2 (111.A well requirements) the anticipated surface pressure assuming a partially evacuated hole with normal pressure gradient of 0.22 psi/ft will be 1226 psi (5575' TVD x 0.22 psi/ft).

The accumulator system capacity will be sufficient to close all BOPE with a 50% safety factor. Fill line, kill line and line to the choke manifold will be 2".

BOPs will be function tested every 24 hours and will be recorded on an IADC log. Accessories to the BOPE will include upper and lower Kelly cocks with handles with a stabbing valve to fit drill pipe on the floor at all times, string float at bit, 2000 psig choke manifold with 2" adjustable and 2" positive chokes, and pressure gauge.

All BOP equipment will be hydraulically operated with controls accessible both on the rig floor.

The wellhead BOP equipment will be nipped-up on the 9-5/8" x 11" 2000 psi WP casing head prior to drilling out from under surface casing. All ram preventers and related equipment will be tested to 2000 psi for 10 minutes. Annular preventers will be tested to 50% of rated working pressure for 10 minutes. Surface casing will be tested to 70% of internal yield pressure. All preventers and surface casing will be tested before drilling out of surface casing. BOP equipment will be tested every 14 days, after any repairs are made to the BOP equipment, and after the BOP equipment is subjected to pressure. Annular preventers will be functionally operated at least once per week. Pipe rams will be activated daily and blind rams shall be activated each trip or at least weekly. The New Mexico Oil & Gas Conservation Commission and the BLM will be notified 24 hours in advance of testing of BOPE.

4. PROPOSED BIT AND CASING PROGRAM

A. Bit Program

12-1/4" Surface Hole = Surface to 320'

8-3/4" = 320' to 8064' = 7" Casing point @ 85 degrees

8-3/4" Landing point = 8171' @ 90.38 degrees

6-1/8" Lateral = 8064' MD to 10278' MD = Gallup Pay Zone Horizontal

B. Casing Program - all casing strings are new casing

Casing & Hole Size	Weight	Grade	Coupling	Setting Depth (MD)	Comments
9-5/8" (12-1/4")	36 ppf	J or K-55	LT&C	0' - 320'	New casing. Cement to surface.
7" (8-3/4")	23 ppf	J or K-55	LT&C	0' - 8064' MD	New Casing. Cement to surface with one stage
4-1/2" (6-1/8")	11.6 ppf	P-110	LT&C	5700' - 10728' MD	New Casing - Horizontal Hole Cemented full length with foam cement - TOL at 60 degrees.

Casing strings below the conductor casing will be tested to .22 psi per foot of casing string length or 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield.

Minimum casing design factors used:

Collapse -	1.125
Burst -	1.0
Jt. Strength -	1.60

Surface casing shall have a minimum of 1 centralizer per joint on the bottom three (3) joints, starting with the shoe joint for a total of (4) minimum centralizers. Centralizers will be placed 10' above the shoe on the shoe joint, on the 1st, 2nd and 3rd casing collars.

The intermediate casing will be centralized using 1 centralizer the first 6 jts and spaced appropriately through the curve section of the well-bore and then spaced +/- 1 centralizer / 4 jts through the remainder of the cement column, using approximately 40 centralizers.

8. PROPOSED CEMENTING PROGRAM

The proposed cementing program has been designed to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. All indications of useable water shall be reported.

- The proposed cementing program is as follows:

Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a pre-flush fluid, inner string cement method, etc. shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.

Surface Casing Single Stage Job - (0-320'):

Excess - 100% over gauge hole - 12-1/4" hole and 9-5/8" casing (0.3132ft³/ft)

Top of Cement - Surface

Stage 1

Fluid 1: Water Spacer

Fresh Water

Fluid Density: 8.33 lbm/gal

Volume: 10 bbl

Fluid 2: Lead Slurry

HALCEM (TM) SYSTEM

94 lbm Premium Cement

0.1250 lbm Poly-E-Flake

5.13 Gal FRESH WATER

Fluid Weight: 15.8 lbm/gal

Volume: 55.8 bbl

Slurry Yield: 1.174 ft³/sack

Total Mixing Fluid: 5.13 Gal/sack

Top Of Fluid: 0 ft

Calculated Fill: 500 ft

Calculated sack: 266.77 sack

Proposed sack: 270 sack

Fluid 3: Water Based Spacer

Displacement

Fluid Density: 8.33 lbm/gal

Volume: 38.7 bbl

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate	Downhole Volume
1	SPACER	Fresh Water	8.33		10 bbl
2	CEMENT	HalCem Primary	15.8		270 sack
3	SPACER	Displacement	8.33		38.7 bbl

Intermediate Casing - One Stage Job (0- 6.064' MD):

Excess - 50% over gauge hole - 8-3/4" hole and 7" casing (0.1503 ft³/ft)

Top of Cement - Surface

Stage 1

Fluid 1: Water Spacer

Fresh Water	Fluid Density:	8.33 lbm/gal
	Liquid Volume:	10 bbl

Fluid 2: Reactive Spacer

Chemical Wash 1000 gal/Mgal FRESH WATER	Fluid Density:	8.4 lbm/gal
	Liquid Volume:	40 bbl

Fluid 3: Lead Slurry

HALCEM (TM) SYSTEM 11.80 Gal FRESH WATER	Fluid Weight:	11.5 lbm/gal
	Slurry Yield:	2.15 ft ³ /sack
	Total Mixing Fluid:	11.8 Gal/sack
	Top Of Fluid:	4539 ft
	Calculated Fill:	831 ft
	Liquid Volume:	32.5 bbl
	Calculated sack:	81.33 sack
	Proposed sack:	85 sack

Fluid 4: Foamed

ELASTISEAL (TM) SYSTEM 1.50 % CHEM - FOAMER 760, TOTETANK 6.73 Gal FRESH WATER	Fluid Weight:	13 lbm/gal
	Slurry Yield:	1.46 ft ³ /sack
	Total Mixing Fluid:	6.83 Gal/sack
	Top Of Fluid:	5370 ft
	Calculated Fill:	293 ft
	Liquid Volume:	11 bbl
	Calculated sack:	42.26 sack
	Proposed sack:	570 sack

Fluid 5: Tail Slurry

HALCEM (TM) SYSTEM 5.70 Gal FRESH WATER	Fluid Weight:	13.5 lbm/gal
	Slurry Yield:	1.32 ft ³ /sack
	Total Mixing Fluid:	5.7 Gal/sack
	Top Of Fluid:	5663 ft
	Calculated Fill:	510 ft
	Liquid Volume:	19.1 bbl
	Calculated sack:	81.33 sack
	Proposed sack:	100 sack

Fluid 6: Water Based Spacer

Displacement	Fluid Density:	8.4 lbm/gal
	Liquid Volume:	230 bbl

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate	Downhole Volume
1	SPACER	Fresh Water	8.33		10 bbl
2	SPACER	Chemical Wash	8.4		40 bbl
3	CEMENT	Scavenger Cement	11.5		85 sack
4	CEMENT	Foamed Lead Cement	13		570 sack
5	CEMENT	Unfoamed Tail	13.5		100 sack
6	SPACER	Displacement	8.4		230 bbl

Cement volumes are minimums and may be adjusted based on caliper log results.

Production Casing - Single Stage Job (5700' - 10728' MD):
Excess - 50% over gauge hole - 6-1/8" hole and 4-1/2" casing (0.0942 ft3/ft)
Top of Cement - Top of Liner.

Stage 1

Fluid 1: Water Spacer

Fresh Water	Fluid Density:	8.33 lbm/gal
	Liquid Volume:	10 bbl

Fluid 2: Rheologically Enhanced Spacer

10 lb/gal Tuned Spacer III 38.32 gal/bbl FRESH WATER 1 gal/bbl SEM-7 1 gal/bbl Musol(R) A 45 gal/bbl BAROID 41 - 50 LB BAG	Fluid Density:	10 lbm/gal
	Liquid Volume:	40 bbl

Fluid 3: Water Spacer

Fresh Water	Fluid Density:	8.33 lbm/gal
	Liquid Volume:	10 bbl

Fluid 4: Lead Slurry

ELASTISEAL (TM) SYSTEM 6.84 Gal FRESH WATER	Fluid Weight:	13 lbm/gal
	Slurry Yield:	1.46 ft3/sack
	Total Mixing Fluid:	6.84 Gal/sack
	Top Of Fluid:	6364 ft
	Calculated Fill:	598 ft
	Liquid Volume:	11.7 bbl
	Calculated sack:	44.32 sack
	Proposed sack:	45 sack

Fluid 5: Foamed

ELASTISEAL (TM) SYSTEM 2.50 % CHEM - FOAMER 760, TOTETANK 6.68 Gal FRESH WATER	Fluid Weight:	13 lbm/gal
	Slurry Yield:	1.46 ft3/sack
	Total Mixing Fluid:	6.85 Gal/sack
	Top Of Fluid:	6962 ft
	Calculated Fill:	3031 ft
	Liquid Volume:	59.8 bbl
	Avg Foamed Yield:	ft3/sack
	Foamed Volume:	58.5 bbl
	Calculated sack:	224.82 sack
	Proposed sack:	230 sack

Fluid 6: Tail Slurry

ELASTISEAL (TM) SYSTEM 5.72 Gal FRESH WATER	Fluid Weight:	13.5 lbm/gal
	Slurry Yield:	1.3 ft ³ /sack
	Total Mixing Fluid:	5.72 Gal/sack
	Top Of Fluid:	9993 ft
	Calculated Fill:	1164 ft
	Liquid Volume:	22.5 bbl
	Calculated sack:	97 sack
	Proposed sack:	100 sack

Fluid 7: Water Based Spacer

MMCR Displacement	Fluid Density:	8.4 lbm/gal
0.25 gal/bbl Micro Matrix Retarder	Liquid Volume:	20 bbl

Fluid 8: Water Spacer

Fresh Water Displacement	Fluid Density:	8.4 lbm/gal
	Liquid Volume:	130 bbl

Stage 1

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate	Downhole Volume
1	SPACER	Fresh Water	8.33		10 bbl
2	SPACER	10 lb/gal Tuned Spacer III	10		40 bbl
3	SPACER	Fresh Water	8.33		10 bbl
4	CEMENT	Unfoamed Lead	13		45 sack
5	CEMENT	Foamed Cement	13		230 sack
6	CEMENT	Unfoamed Tail	13.5		100 sack
7	SPACER	MMCR Displacement	8.4		20 bbl
8	SPACER	Fresh Water Displacement	8.4		130 bbl

Foam Output Parameter Summary:

Stage 1						
Foam Calculation Method :		Constant Density		Calculated Gas : 21317.7 scf		
Annulus Back Pressure :		20 psig		Additional Gas : 50000 scf		
Bottom Hole Circulating Temp :		145degF		Total Gas : 71317.7 scf		
Mud Outlet Temperature :		100degF				
Fluid #	Fluid Name	Unfoamed Liquid Volume (bbl)	Beginning Density (lbm/gal)	Ending Density (lbm/gal)	Beginning Rate (scf/bbl)	Ending Rate (scf/bbl)
2	10 lb/gal Tuned Spacer III	45	10		-42.58	-43.5
5	Foamed Cement	1.2	10		321.57	325.53

Production liner clarification: Utilizing foam cement for zonal isolation in the production liner.

Actual volumes will be calculated and determined by conditions onsite. All cement slurries will meet or exceed minimum BLM and New Mexico Oil Conservation Division requirements. Slurries used will be the slurries listed above or equivalent slurries depending on service provider selected. Cement yields may change depending on slurries selected.

All waiting on cement times shall be a minimum of 8 hours or adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

6. PROPOSED DRILLING FLUIDS PROGRAM

A. Vertical Portion:

Hole Size (in)	TVD (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
12-1/4"	0-320'	Fresh Water	8.4-8.6	60-70	NC
8-3/4"	320'-4591'	Fresh Water LSND	8.5-8.8	40-50	8-10

B. Kick off to Horizontal Lateral:

Hole Size (in)	TVD/MD (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (CC)
8-3/4"	4591' (KOP) - 5575' TVD/8171' MD	Fresh Water LSND	8.5-8.8	40-50	8-10
6-1/8"	6171' MD - 10728' MD	Synthetic Oil Based Mud	7.0-9.0	15-25	<1

- There will be sufficient mud on location to control a blowout should one occur. Mud flow and volume will be monitored both visually and with electronic pit volume totalizers. Mud tests shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

- ✓ A closed-loop system will be used to recover drilling fluid and dry cuttings in both phases of the well and on all hole intervals, including fresh water and oil-based operations. Above-ground tanks will be utilized to hold cuttings and fluids for rig operations. A frac tank will be on location to store fresh water. Waste will be disposed of properly at an EPA-approved hazardous waste facility. Fresh water cuttings will be disposed of at Basin Disposal, Inc. and/or Industrial Ecosystems, Inc. The location will be lined in accordance with the Surface Use Plan of Operations.

7. TESTING, CORING and LOGGING

- Drill Stem Testing - None anticipated
- Coring - None anticipated.
- Mud Logging - Mud loggers will be on location from intermediate casing point to TD.
- Logging - See Below
- Gamma Ray from surface casing point to TD

Cased Hole:

CBL/CCL/GRNDL will be run as needed for perforating control

8. ABNORMAL PRESSURES & HYDROGEN SULFIDE

The anticipated bottom hole pressure is +/- 2609 psi based on a 9.0 ppg at 5575' TVD of the landing point of the horizontal. No abnormal pressure or temperatures are anticipated.

No hydrogen sulfide gas is anticipated, however, if H₂S is encountered, the guidelines in Onshore Order No. 6 will be followed.

9. ANTICIPATED START DATE AND DURATION OF OPERATIONS

Drilling is estimated to commence on May 15, 2015. It is anticipated that completion operations will begin within 30 days after the well has been drilled depending on fracture treatment schedules with various pumping service companies. It is anticipated that the drilling of this well will take approximately 25 days.

CLOSED-LOOP SYSTEM DESIGN PLAN

The closed-loop system will consist of a series of temporary above-ground storage tanks and/or haul-off bins suitable for holding the cuttings and fluids from drilling operations. The closed-loop system will not entail temporary pits, below-grade storage tanks, below-grade sumps, or drying pads.

Design considerations include:

- The closed-loop system will be signed in accordance with 19.15.17.11 NMAC.
- The closed-loop system storage tanks will be of adequate volume to ensure confinement of all fluids and provide sufficient freeboard to prevent uncontrolled releases.
- Topsoil will be salvaged and stored for use in reclamation activities.
- The closed-loop system storage tanks will be placed in bermed secondary containment sized to contain a minimum of 110 percent of the volume of the largest storage tank.

CLOSED-LOOP SYSTEM OPERATING & MAINTENANCE PLAN

The closed-loop system will be operated and maintained to contain liquids and solids; minimize the amount of drilling fluids and cuttings that require disposal; maximize the amount of drilling fluid recycled and reused in the drilling process; isolate drilling wastes from the environment; prevent contamination of fresh water; and protect public health and the environment.

Operation and maintenance considerations include:

- Fluid levels will be maintained to provide sufficient freeboard to prevent over-topping.
- Visual inspections will be conducted on a daily basis to identify any potential leaks and to ensure that the closed-loop system storage tanks have sufficient freeboard to prevent over-topping.
- Only drilling fluids or cuttings intrinsic to, used by, or generated from, drilling operations will be stored in the closed-loop system storage tanks. Hazardous waste, miscellaneous solid waste, and/or debris will not be stored in the storage tanks.
- The OCD District Office will be notified within 48 hours of discovery of a leak in the closed-loop drilling system. If a leak is discovered, all liquid will be removed within 48 hours and the damage repaired.

CLOSED-LOOP SYSTEM CLOSURE PLAN

The closed-loop system will be closed in accordance with 19.15.17.13 NMAC. Closure

considerations include:

- Drilling fluids will be recycled and transferred to other permitted closed-loop systems or returned to the vendor for reuse, as practical.
- Residual fluids will be pulled from the storage tanks, mixed with saw dust or similar absorbent material, and disposed of at Industrial Ecosystem, Inc. waste disposal facilities.
- Remaining cuttings or sludges will be vacuumed from the storage tanks and disposed of at the Envirotech, Inc. and/or Industrial Ecosystem, Inc. waste disposal facilities.
- Storage tanks will be removed from the well location during the rig move.
- The well pad will be reclaimed and seeded in accordance with subsections G, Hand I of 19.15.17.13 NMAC.



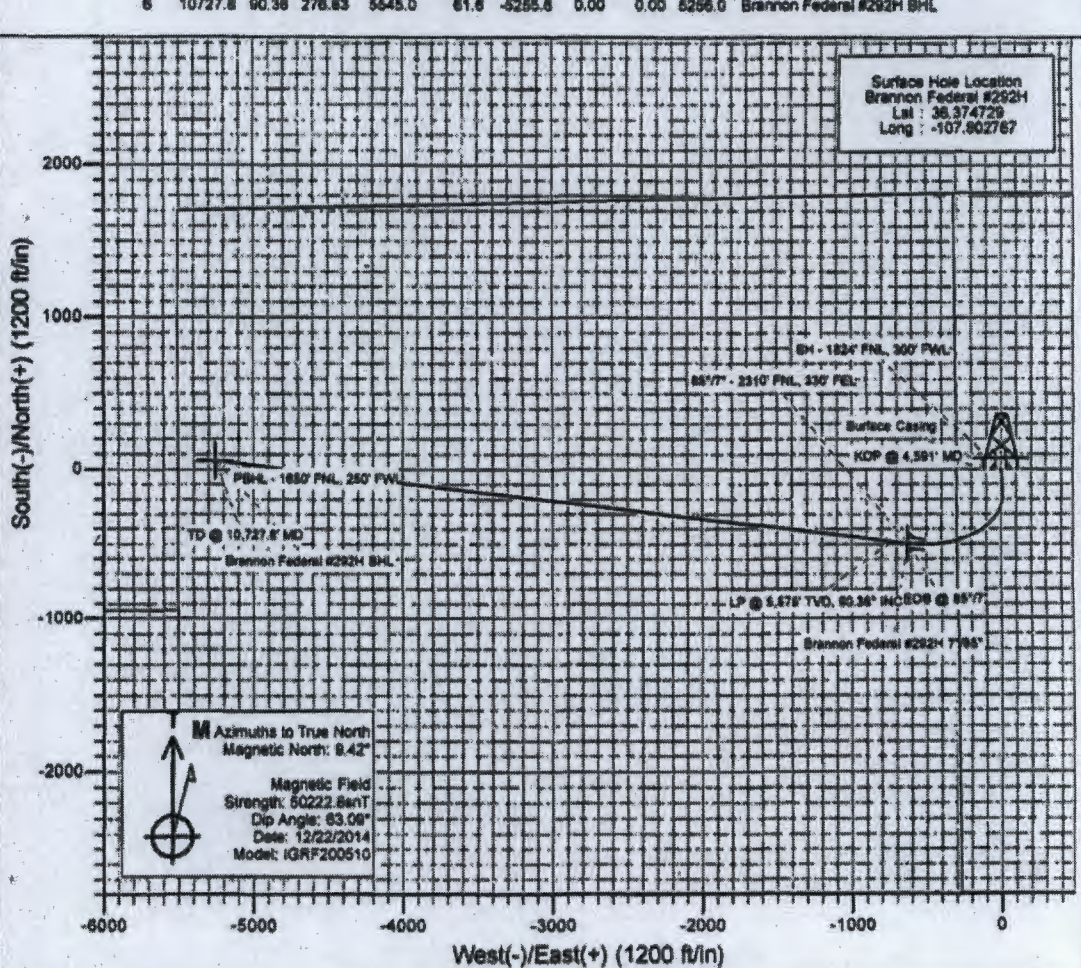
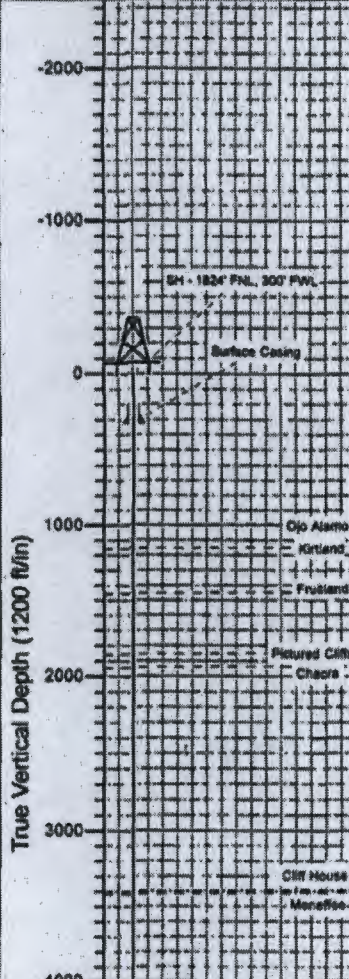
Project: San Juan County, NM
 Site: S28-T25N-R9W (Brannon Pad)
 Well: Brannon Federal #292H
 Wellbore: HZ
 Design: Plan #2



Plan #2
 Brannon Federal #292H
 155XXX, SC
 KB-15' @ 8695.0ft (Aztec #222)
 Ground Elevation @ 8680.0
 North American Datum 1983
 Well Brannon Federal #292H, True North

SECTION DETAILS

Sec	MD	Inc	Asl	TVD	+N/S	+E/W	Dleg	TFace	VSecl	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	4591.0	0.00	0.00	4591.0	0.0	0.0	0.00	0.00	0.0	
3	5032.0	39.67	176.31	4697.6	-146.4	9.4	9.00	176.31	-11.2	Brannon Federal #292H 7°85'
4	6063.6	85.00	276.83	5570.7	-493.3	-824.7	9.00	101.30	818.8	
5	6171.1	90.38	276.83	5575.0	-480.5	-731.4	5.00	0.03	725.7	
6	10727.8	90.38	276.83	5545.0	61.6	-5255.6	0.00	0.00	5295.0	Brannon Federal #292H BHL



Azimuths to True North
 Magnetic North: 9.42°
 Magnetic Field
 Strength: 50222.8nT
 Dip Angle: 63.09°
 Date: 12/22/2014
 Model: IGRF200510

DESIGN TARGET DETAILS

Name	+N/S	+E/W	Northing	Easting	Latitude	Longitude
Brannon Federal #292H BHL	61.6	-5255.6	1956708.31	2731470.77	36.374867	-107.820620
Brannon Federal #292H 7°85'	-493.3	-824.7	1956315.08	2731470.77	36.373374	-107.804689

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
996.0	996.0	Ojo Alamo
1154.0	1154.0	Kirtland
1453.0	1453.0	Fruitland
1854.0	1854.0	Pictured Cliffs
1940.0	1940.0	Chaco
3400.0	3400.0	Cliff House
3413.0	3413.0	Menefee
4251.0	4251.0	Point Lookout
4516.0	4516.0	Mancos
5130.2	5214.2	Gallup
5493.1	5786.8	Top Target Zone

CASING DETAILS

TVD	MD	Name
5670.7	6063.6	7"
320.0	320.0	Surface Casing

Vertical Section at 270.67° (1200 ft/in)

Cathedral Energy Services Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Brannon Federal #202H
Company:	LOGOS Operating LLC	TVD Reference:	KB=15' @ 6695.0R (Aztec #222)
Project:	San Juan County, NM	MD Reference:	KB=15' @ 6695.0R (Aztec #222)
Site:	S28-T25N-R0W (Brannon Pad)	North Reference:	True
Well:	Brannon Federal #202H	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

Project	San Juan County, NM		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site	S28-T25N-R0W (Brannon Pad)		
Site Position:		Northing:	1,955,788.51 ft
From:	Lat/Long	Easting:	2,726,839.69 ft
Position Uncertainty:	0.0 ft	Grid Radius:	13.200 in
		Grid Convergence:	0.01 °

Well	Brannon Federal #202H		
Well Position	+N-S	0.0 ft	Northing:
	+E-W	0.0 ft	Easting:
Position Uncertainty	0.0 ft	Wellhead Elevation:	0.0 ft
		Ground Level:	6,680.0 ft

Wellbore	HZ		
Magnetic	Model Name	Sample Date	Declination
	IGRF200510	12/22/2014	9.42
			Dip Angle
			63.08
			Field Strength
			50,223

Design	Plan #2		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N-S	+E-W
	(ft)	(ft)	(ft)
	0.0	0.0	0.0
			270.67

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N-S	+E-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)	
(ft)			(ft)			(°/100R)	(°/100R)	(°/100R)		
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,591.0	0.00	0.00	4,591.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,032.0	39.67	176.31	4,967.8	-146.4	9.4	9.00	9.00	0.00	176.31	
5,083.6	85.00	276.83	5,570.7	-493.3	-824.7	9.00	4.36	9.74	101.30	Brannon Federal #202H
6,171.1	90.38	276.83	5,578.0	-480.5	-731.4	5.00	5.00	0.00	0.03	
10,727.8	90.38	276.83	5,645.0	61.6	-5,255.6	0.00	0.00	0.00	0.00	Brannon Federal #202H

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Brannon Federal #292H
Company:	LOGOS Operating LLC	TVD Reference:	KB=15' @ 6695.0ft (Aztec #222)
Project:	San Juan County, NM	MD Reference:	KB=15' @ 6695.0ft (Aztec #222)
Site:	S28-T25N-R9W (Brannon Pad)	North Reference:	True
Well:	Brannon Federal #292H	Survey Calculation Method:	Minimum Curvature
Wellbore:	H2		
Design:	Plan #2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Altitude (ft)	Vertical Depth (ft)	N/S (ft)	E/W (ft)	Vertical Section (ft)	Dogleg Rate (1/100ft)	Build Rate (1/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
0.5	0.00	0.00	0.5	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	Surface Casing
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	
998.0	0.00	0.00	998.0	0.0	0.0	0.0	0.00	0.00	Ojo Alamo
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	
1,154.0	0.00	0.00	1,154.0	0.0	0.0	0.0	0.00	0.00	Kirtland
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	
1,453.0	0.00	0.00	1,453.0	0.0	0.0	0.0	0.00	0.00	Fruitland
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	
1,854.0	0.00	0.00	1,854.0	0.0	0.0	0.0	0.00	0.00	Pictured Cliffs
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	
1,940.0	0.00	0.00	1,940.0	0.0	0.0	0.0	0.00	0.00	Chacra
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	Cliff House
3,413.0	0.00	0.00	3,413.0	0.0	0.0	0.0	0.00	0.00	Meneffes
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	
4,251.0	0.00	0.00	4,251.0	0.0	0.0	0.0	0.00	0.00	Point Lookout

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Brannon Federal #292H
Company:	LOGOS Operating LLC	TVD Reference:	KB=15' @ 6895.0ft (Aztec #222)
Project:	San Juan County, NM	MD Reference:	KB=15' @ 6895.0ft (Aztec #222)
Site:	S28-T25N-R6W (Brannon Pad)	North Reference:	True
Well:	Brannon Federal #292H	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments Formations
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	
4,516.0	0.00	0.00	4,516.0	0.0	0.0	0.0	0.00	0.00	Mancos
4,591.0	0.00	0.00	4,591.0	0.0	0.0	0.0	0.00	0.00	KOP @ 4,591' MD
4,600.0	0.81	176.31	4,600.0	-0.1	0.0	0.0	8.99	8.99	
4,650.0	5.31	176.31	4,649.9	-2.7	0.2	-0.2	9.00	9.00	
4,700.0	9.81	176.31	4,699.5	-9.3	0.8	-0.7	9.00	9.00	
4,750.0	14.30	176.31	4,748.4	-19.7	1.3	-1.5	9.00	9.00	
4,800.0	18.90	176.31	4,796.3	-33.9	2.2	-2.6	9.00	9.00	
4,850.0	23.30	176.31	4,842.9	-51.8	3.3	-3.9	9.00	9.00	
4,900.0	27.80	176.31	4,888.0	-73.3	4.7	-5.6	9.00	9.00	
4,950.0	32.30	176.31	4,931.3	-98.3	6.3	-7.5	9.00	9.00	
5,000.0	36.80	176.31	4,972.5	-126.6	8.2	-9.6	9.00	9.00	
5,032.0	39.67	176.31	4,967.6	-145.4	9.4	-11.2	9.00	9.00	
5,050.0	39.38	176.82	5,011.5	-157.8	9.9	-11.8	9.00	-1.81	
5,100.0	38.86	185.90	5,050.3	-189.3	8.6	-10.9	9.00	-1.04	
5,150.0	38.78	193.08	5,089.3	-220.2	3.5	-8.1	9.00	-0.17	
5,200.0	38.13	200.21	5,126.2	-250.2	-5.5	2.6	9.00	0.71	
5,214.2	39.31	202.21	5,139.2	-258.6	-8.8	5.7	9.00	1.28	Gallup
5,250.0	39.91	207.18	5,168.7	-279.3	-18.3	16.0	9.00	1.68	
5,300.0	41.10	213.86	5,204.6	-307.3	-34.6	31.2	9.00	2.36	
5,350.0	42.64	220.19	5,242.0	-333.9	-54.9	61.0	9.00	3.10	
5,400.0	44.52	226.13	5,278.3	-359.0	-78.5	74.3	9.00	3.75	
5,450.0	46.68	231.65	5,313.3	-382.4	-105.4	100.9	9.00	4.32	
5,500.0	49.09	236.77	5,346.8	-404.1	-135.5	130.7	9.00	4.82	
5,550.0	51.71	241.52	5,378.7	-423.8	-168.5	163.6	9.00	5.24	
5,600.0	54.51	245.93	5,408.7	-441.4	-204.4	199.2	9.00	5.59	
5,680.0	57.45	250.03	5,436.7	-456.9	-242.8	237.4	9.00	5.89	
5,700.0	60.52	253.67	5,462.5	-470.2	-283.5	278.0	9.00	6.14	
5,750.0	63.70	257.48	5,485.8	-481.1	-326.3	320.7	9.00	6.35	
5,788.8	64.78	258.84	5,493.1	-484.2	-341.1	335.4	9.00	6.47	Top Target Zone
5,800.0	66.96	260.89	5,506.7	-489.6	-371.0	385.2	9.00	6.56	
5,850.0	70.29	264.14	5,524.9	-495.7	-417.1	411.3	9.00	6.68	
5,900.0	73.67	267.25	5,540.4	-499.2	-484.5	458.6	9.00	6.77	
5,950.0	77.10	270.26	5,553.0	-500.3	-512.9	507.0	9.00	6.86	
6,000.0	80.56	273.19	5,562.7	-498.6	-561.9	556.0	9.00	6.93	
6,050.0	84.05	276.06	5,569.4	-494.6	-611.3	605.4	9.00	6.97	
6,083.6	85.00	276.83	5,570.7	-493.3	-624.7	618.8	8.98	6.98	EOB @ 85°/7" - 85°/7" - 2310' FNL, 330' FEL -
6,100.0	86.82	276.83	5,573.3	-488.9	-660.6	655.0	5.00	5.00	
6,171.1	90.38	276.83	5,575.0	-480.5	-731.3	725.6	5.00	5.00	LP @ 5,575' TVD, 90.38° INC
6,200.0	90.38	276.83	5,574.9	-477.0	-760.0	754.4	0.01	0.01	
6,300.0	90.38	276.83	5,574.2	-485.1	-859.3	853.8	0.00	0.00	
6,400.0	90.38	276.83	5,573.5	-453.2	-958.6	953.2	0.00	0.00	
6,500.0	90.38	276.83	5,572.9	-441.4	-1,057.9	1,052.6	0.00	0.00	
6,600.0	90.38	276.83	5,572.2	-429.5	-1,157.2	1,152.0	0.00	0.00	
6,700.0	90.38	276.83	5,571.6	-417.6	-1,256.4	1,251.8	0.00	0.00	
6,800.0	90.38	276.83	5,570.9	-405.7	-1,355.7	1,350.9	0.00	0.00	
6,900.0	90.38	276.83	5,570.2	-393.8	-1,455.0	1,446.3	0.00	0.00	
7,000.0	90.38	276.83	5,569.6	-381.9	-1,554.3	1,549.7	0.00	0.00	
7,100.0	90.38	276.83	5,568.9	-370.0	-1,653.6	1,649.1	0.00	0.00	
7,200.0	90.38	276.83	5,568.3	-358.1	-1,752.9	1,748.6	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Brannon Federal #292H
Company:	LOGOS Operating LLC	TVD Reference:	KB=15' @ 6695.0ft (Aztec #222)
Project:	San Juan County, NM	MD Reference:	KB=15' @ 6695.0ft (Aztec #222)
Site:	S26-T25N-R9W (Brannon Pad)	North Reference:	True
Well:	Brannon Federal #292H	Survey Calculation Method:	Minimum Curvature
Wellbore:	H2		
Design:	Plan #2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
7,300.0	90.38	276.83	5,567.8	-348.2	-1,852.2	1,848.0	0.00	0.00	
7,400.0	90.38	276.83	5,566.9	-334.3	-1,951.5	1,947.4	0.00	0.00	
7,500.0	90.38	276.83	5,566.3	-322.4	-2,050.7	2,046.8	0.00	0.00	
7,600.0	90.38	276.83	5,565.6	-310.5	-2,150.0	2,146.2	0.00	0.00	
7,700.0	90.38	276.83	5,565.0	-298.6	-2,249.3	2,245.7	0.00	0.00	
7,800.0	90.38	276.83	5,564.3	-286.7	-2,348.6	2,345.1	0.00	0.00	
7,900.0	90.38	276.83	5,563.7	-274.8	-2,447.9	2,444.5	0.00	0.00	
8,000.0	90.38	276.83	5,563.0	-262.9	-2,547.2	2,543.9	0.00	0.00	
8,100.0	90.38	276.83	5,562.3	-251.0	-2,646.5	2,643.3	0.00	0.00	
8,200.0	90.38	276.83	5,561.7	-239.1	-2,745.8	2,742.8	0.00	0.00	
8,300.0	90.38	276.83	5,561.0	-227.2	-2,845.1	2,842.2	0.00	0.00	
8,400.0	90.38	276.83	5,560.4	-215.3	-2,944.3	2,941.6	0.00	0.00	
8,500.0	90.38	276.83	5,559.7	-203.4	-3,043.6	3,041.0	0.00	0.00	
8,600.0	90.38	276.83	5,559.0	-191.5	-3,142.9	3,140.5	0.00	0.00	
8,700.0	90.38	276.83	5,558.4	-179.6	-3,242.2	3,239.9	0.00	0.00	
8,800.0	90.38	276.83	5,557.7	-167.7	-3,341.5	3,339.3	0.00	0.00	
8,900.0	90.38	276.83	5,557.1	-155.8	-3,440.8	3,438.7	0.00	0.00	
9,000.0	90.38	276.83	5,556.4	-143.9	-3,540.1	3,538.1	0.00	0.00	
9,100.0	90.38	276.83	5,555.7	-132.0	-3,639.4	3,637.6	0.00	0.00	
9,200.0	90.38	276.83	5,555.1	-120.1	-3,738.6	3,737.0	0.00	0.00	
9,300.0	90.38	276.83	5,554.4	-108.2	-3,837.9	3,836.4	0.00	0.00	
9,400.0	90.38	276.83	5,553.8	-96.3	-3,937.2	3,935.8	0.00	0.00	
9,500.0	90.38	276.83	5,553.1	-84.4	-4,036.5	4,035.2	0.00	0.00	
9,600.0	90.38	276.83	5,552.4	-72.5	-4,135.8	4,134.7	0.00	0.00	
9,700.0	90.38	276.83	5,551.8	-60.6	-4,235.1	4,234.1	0.00	0.00	
9,800.0	90.38	276.83	5,551.1	-48.7	-4,334.4	4,333.5	0.00	0.00	
9,900.0	90.38	276.83	5,550.5	-36.8	-4,433.7	4,432.8	0.00	0.00	
10,000.0	90.38	276.83	5,549.8	-24.9	-4,532.9	4,532.3	0.00	0.00	
10,100.0	90.38	276.83	5,549.1	-13.1	-4,632.2	4,631.8	0.00	0.00	
10,200.0	90.38	276.83	5,548.5	-1.2	-4,731.5	4,731.2	0.00	0.00	
10,300.0	90.38	276.83	5,547.8	10.7	-4,830.8	4,830.6	0.00	0.00	
10,400.0	90.38	276.83	5,547.2	22.6	-4,930.1	4,930.0	0.00	0.00	
10,500.0	90.38	276.83	5,546.5	34.5	-5,029.4	5,029.4	0.00	0.00	
10,600.0	90.38	276.83	5,545.9	46.4	-5,128.7	5,128.9	0.00	0.00	
10,700.0	90.38	276.83	5,545.2	58.3	-5,228.0	5,228.3	0.00	0.00	
10,727.8	90.38	276.83	5,545.0	61.8	-5,255.6	5,255.9	0.00	0.00	TD @ 10,727.8' MD

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N-S (ft)	+E-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Brannon Federal #292H - hit/mis target - Shape - Point	0.00	0.00	5,545.0	61.8	-5,255.6	1,955,768.51	2,729,839.69	36.374897	-107.620620
Brannon Federal #292H - plan hits target center - Point	0.00	0.00	5,570.7	-493.3	-624.7	1,955,215.08	2,731,470.77	36.373374	-107.604889

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Brannon Federal #292H
Company:	LOGOS Operating LLC	TVD Reference:	KB=15' @ 6695.0ft (Aztec #222)
Project:	San Juan County, NM	MD Reference:	KB=15' @ 6695.0ft (Aztec #222)
Site:	S28-T25N-R9W (Brannon Pad)	North Reference:	True
Well:	Brannon Federal #292H	Survey Calculation Method:	Minimum Curvature
Wellbore:	H2		
Design:	Plan #2		

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
6,063.6	5,570.7	7"	0.000	0.000
320.0	320.0	Surface Casing	0.000	0.000

Formations				
Measured Depth (ft)	Vertical Depth (ft)	Name	Dip (°)	Dip Direction
998.0	998.0	Ojo Alamo	-0.38	276.83
1,154.0	1,154.0	Kirtland	-0.38	276.83
1,453.0	1,453.0	Fruitland	-0.38	276.83
1,854.0	1,854.0	Pictured Cliffs	-0.38	276.83
1,940.0	1,940.0	Chacra	-0.38	276.83
3,400.0	3,400.0	Cliff House	-0.38	276.83
3,413.0	3,413.0	Menefee	-0.38	276.83
4,251.0	4,251.0	Point Lookout	-0.38	276.83
4,516.0	4,516.0	Mancos	-0.38	276.83
5,214.2	5,190.0	Gallup	-0.38	276.83
5,766.8	5,495.0	Top Target Zone	-0.38	276.83

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		N-S (ft)	E-W (ft)	
0.5	0.5	0.0	0.0	SH - 1824' FNL, 300' FWL
4,591.0	4,591.0	0.0	0.0	KOP @ 4,591' MD
6,063.6	5,570.7	-493.3	-624.7	EOB @ 85°/7"
6,063.6	5,570.7	-493.3	-624.7	85°/7" - 2310' FNL, 330' FEL
6,171.1	5,575.0	-480.5	-731.3	LP @ 5,575' TVD, 80.38° INC
10,727.8	5,545.0	61.6	-5,255.6	TD @ 10,727.8' MD
10,727.8	5,545.0	61.6	-5,255.6	PBHL - 1650' FNL, 250' FWL

4. Production Facilities

Production facilities will be deferred until after completion, but the following is a typical production layout:

- a. Access will likely be a teardrop-shaped road through the production area (as practical), so the center may be re-vegetated.
- b. Production facilities will be painted Carlsbad Brown to blend with the natural color of the landscape and, to the extent possible, will be located to reasonably minimize the visual impact.
- c. A berm will be constructed completely around any production facilities which contain fluids (i.e., production tanks, produced water tanks, etc.). Berms will be constructed according to the Gold Book standards.
- d. After completion of the construction phases of the project, areas not used for operation will be reclaimed. When the well is plugged, the remainder of the project area will be reclaimed.

G. Methods for Handling Waste

1. Cuttings

- a. All cuttings will be placed in a reserve pit lined with a 20 mil string re-enforced material and constructed to meet the New Mexico Oil Conservation Division (NMOCD) pit guidelines. Cuttings will be hauled to a commercial disposal facility after drilling is completed. The reserve pit will be fenced prior to drilling.
- b. After drilling, any free liquids in the cuttings pit will be disposed of at the appropriate waste disposal facilities. The solids in the reserve pit will be allowed to dry, be tested, and buried according to NMOCD pit rules.
- c. Logos will follow Onshore Oil and Gas Order No. 1 regarding the placement, operation, and removal of closed-loop systems. No blow pit will be used.
- d. Closed-loop tanks will be adequately sized for containment of all fluids.

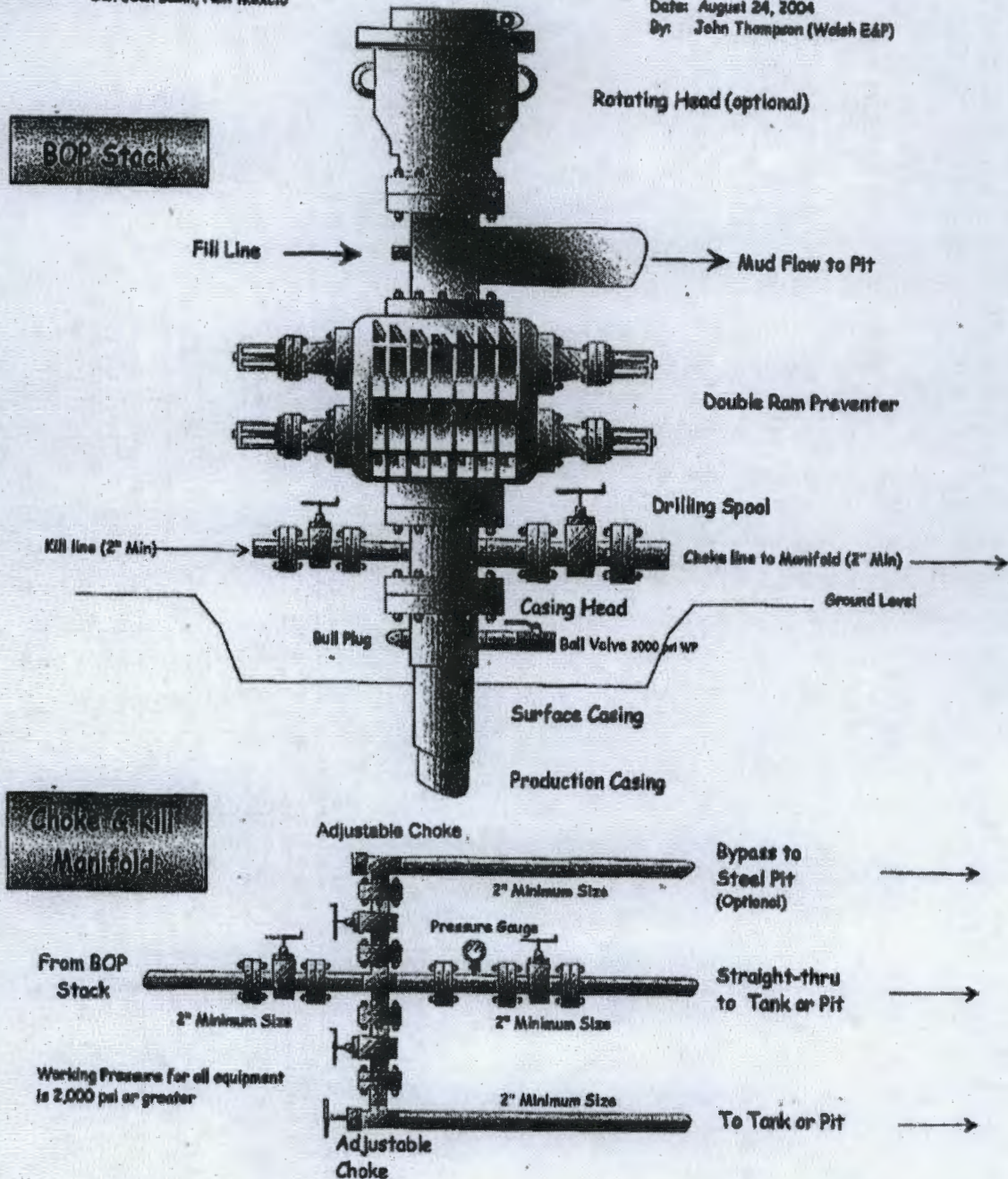
Well Control Equipment Schematic for 2M Service

Attachment to Drilling Technical Program

Exhibit #1 Typical BOP setup

Location: San Juan Basin, New Mexico

Date: August 24, 2004
By: John Thompson (Welsh E&P)





4001 N. Butler Blvd. Bldg 7101
Farmington, NM 87401
Phone: (505) 436-2626
Fax: (303) 974-1767

April 30, 2015

NMOCD- Santa Fe Office
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Sent Via US Priority Mail

**Re: Logos Operating, LLC
Downhole Comingling Application Notice
Brannon Federal 292H well
API No. – 30-045-35645
1824' FNL and 300' FWL (Surface)
SW/4NW/4 Section 28, T25N, R9W
1650' FNL and 250' FWL (Bottom)
SW/4NW/4 Section 29, T25N, R9W
San Juan County, New Mexico**

To whom it may concern:

Enclosed please find a C-107A application and associated documents for the Brannon Federal 292H well. This application requests commingling of the following two pools:

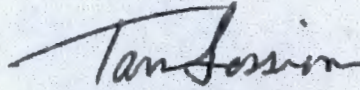
- White Wash Mancos-Dakota (Pool Code 64290)- Oil
- Basin Mancos (Pool Code 97232)- Oil

This downhole comingling application is for one horizontal well to be drilled through one formation that is administratively divided between two pools covering the same Mancos formation (the White Wash Mancos and the Basin Mancos). Pending approval of a non-standard spacing unit application, the spacing unit for the well will be the S/2N/2 of Section 29 of T25N, R9W. Both pools are estimated to have the exact same oil gravity, gas btu, water rates, and bottomhole pressures which will be determined upon the drilling of the well. The S/2NW/4 of Section 29 is considered Basin Mancos by the OCD, and the S/2NE/4 is considered White Wash by the OCD. As such, LOGOS proposes that there be a fixed allocation between the two pools based on the % of the spacing unit they cover. Based on this methodology, the White Wash Mancos is proposed to have 50% allocated to it with the Basin Mancos having 50% of production allocated to it.

The Federal government owns 100% minerals in all depths in this well and has been notified of this application. All ownership is uniform across all depths. Please refer to the NSL/NSP application for Unorthodox Well Location and Unorthodox Spacing Unit.

Should you have any concerns regarding this application please contact me at 505-436-2606 or tsessions@logosresourcesllc.com

Very truly yours,

A handwritten signature in black ink, appearing to read "Tamra Sessions". The signature is fluid and cursive, with a long horizontal stroke extending to the left.

Tamra Sessions
Operations Technician
Enclosures: C107A application

Instructions

1. Each Click-N-Ship® label is unique. Labels are to be used as printed and used only once. **DO NOT PHOTO COPY OR ALTER LABEL.**
2. Place your label so it does not wrap around the edge of the package.
3. Adhere your label to the package. A self-adhesive label is recommended. If tape or glue is used, **DO NOT TAPE OVER BARCODE.** Be sure all edges are secure.
4. To mail your package with PC Postage®, you may schedule a Package Pickup online, hand to your letter carrier, take to a Post Office™, or drop in a USPS collection box.
5. Mail your package on the "Ship Date" you selected when creating this label.

Click-N-Ship® Label Record

USPS TRACKING # :

9405 5036 9930 0047 6797 63

Trans. #: 334252447
Print Date: 04/30/2016
Ship Date: 04/30/2016
Expected
Delivery Date: 05/04/2016

Priority Mail® Postage: \$5.05
Total: \$5.05

From: JOHN A AKERS
LOGOS
110 30TH AVE N STE 4
NASHVILLE TN 37203-6313

To: MERRION OIL AND GAS
810 REILLY AVE
FARMINGTON NM 87401-2834

* Commercial Base Pricing Priority Mail rates apply. There is no fee for USPS Tracking™ service on Priority Mail service with use of this electronic rate shipping label. Refunds for unused postage paid labels can be requested online 30 days from the print date.



**UNITED STATES
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Click-N-Ship® Label Record

USPS TRACKING # :

9405 5036 9930 0047 6797 70

Trans. #: 334252447
Print Date: 04/30/2015
Ship Date: 04/30/2015
Expected Delivery Date: 05/02/2015

Priority Mail® Postage: \$5.08
Total: \$5.08

From: JOHN A AKERS
LOGOS
110 30TH AVE N STE 4
NASHVILLE TN 37203-8313

To: CHRIS JEFFUS
ENERVEST OPERATING, LLC
1001 FANNIN ST
STE 800
HOUSTON TX 77002-6707

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Click-N-Ship® Label Record

USPS TRACKING # :

9405 5036 9930 0047 6797 87

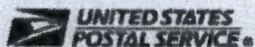
Trans. #: 334252447
Print Date: 04/30/2015
Ship Date: 04/30/2015
Expected
Delivery Date: 05/04/2015

Priority Mail® Postage: **\$5.05**
Total: **\$5.05**

From: JOHN A AKERS
LOGOS
110 30TH AVE N STE 4
NASHVILLE TN 37203-6313

To: BLM FARMINGTON FIELD OFFICE- NON STANDARD
LOCATION
6261 COLLEGE BLVD
FARMINGTON NM 87402-1736

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Click-N-Ship® Label Record

USPS TRACKING #:

9405 5036 9930 0047 6798 31

Trans. #: 334252447
Print Date: 04/30/2015
Ship Date: 04/30/2015
Expected
Delivery Date: 05/04/2015

Priority Mail® Postage: **\$5.05**
Total: **\$5.05**

From: JOHN A AKERS
LOGOS
110 30TH AVE N STE 4
NASHVILLE TN 37203-6313

To: MIKE MCMILLAN
NEW MEXICO OIL CONSERVATION DIVISION
1220 S SAINT FRANCIS DR
SANTA FE NM 87505-4225

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5. Mail your package on the "Ship Date" you selected when creating this label.

Click-N-Ship® Label Record

USPS TRACKING # :

9405 5036 9930 0048 0406 23

Trans. #: 334300865
Print Date: 04/30/2015
Ship Date: 04/30/2015
Expected
Delivery Date: 05/04/2015

Priority Mail® Postage: **\$5.05**
Total: **\$5.05**

From: JOHN A AKERS
LOGOS
110 30TH AVE N STE 4
NASHVILLE TN 37203-6313

To: BRYAN LEWIS
ENERGEN RESOURCES
2010 AFTON PL
FARMINGTON NM 87401-1801

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McMillan, Michael, EMNRD

From: John Austin Akers <aakers@logosresourcesllc.com>
Sent: Thursday, April 30, 2015 1:00 PM
To: McMillan, Michael, EMNRD; Pickford, Katherine, EMNRD
Cc: Tamra Sessions
Subject: RE: LOGOS NSL/NSP application- Brannon 292H

Hi Mike,

Please see comments below and let me know if I need to do anything additional.

Thanks,

John "Austin" Akers
Vice President of Land- Logos Resources, LLC
P:615-523-2661 F: 303-974-1767

From: McMillan, Michael, EMNRD [<mailto:Michael.McMillan@state.nm.us>]
Sent: Thursday, April 30, 2015 1:57 PM
To: John Austin Akers; Pickford, Katherine, EMNRD
Cc: Tamra Sessions
Subject: RE: LOGOS NSL/NSP application- Brannon 292H

Austin:

I will add the DHC to your application-it all goes together. Perfect- thanks

Is your terminus your final perforation? ~~Yes~~ → NO → see letter that states 330' w
For the NSP, is the N/2 NW/4 of the section identical ownership to the S/2 NW/4 of Section 29. If the ownership is not identical, then those affected parties will have to be notified for the NSP, because they are being excluded. It is identical
Provide that the affected parties were sent certified mail. We sent them Priority mail with tracking- does that work?
Who the rest of Section 30, excluding the SW/4, unless an existing well is the Basin Mancos exists in that section? We
have 50% and Energen has 50% in the SE/4- I thought since the encroachment would not be within 660' of the SE/4 it
would not be an issue?

Thanks

Mike

From: John Austin Akers [<mailto:aakers@logosresourcesllc.com>]
Sent: Thursday, April 30, 2015 12:31 PM
To: McMillan, Michael, EMNRD; Pickford, Katherine, EMNRD
Cc: Tamra Sessions
Subject: LOGOS NSL/NSP application- Brannon 292H
Importance: High

Dear Mike,

Attached per our discussions yesterday please find the LOGOS Resources, LLC application for NSL and NSP for the Brannon Federal 292H. I have copied Kate Pickford with the Aztec office per your request. A hard copy of this application will be mailed to you today along with notices to all affected parties. Please let me know if you have any questions or concerns. After this is approved LOGOS will also be submitting a DH application for these pools.

McMillan, Michael, EMNRD

From: Tamra Sessions <tsessions@logosresourcesllc.com>
Sent: Tuesday, May 19, 2015 7:02 AM
To: McMillan, Michael, EMNRD; John Austin Akers; Pickford, Katherine, EMNRD
Subject: RE: LOGOS NSL/NSP application- Brannon 292H

Thank you Mike for the clarification.

Tamra

From: McMillan, Michael, EMNRD [<mailto:Michael.McMillan@state.nm.us>]
Sent: Monday, May 18, 2015 9:32 AM
To: John Austin Akers; Pickford, Katherine, EMNRD
Cc: Tamra Sessions
Subject: RE: LOGOS NSL/NSP application- Brannon 292H

Austin:

This is for clarity of the DHC allocation- You had requested a fix allocation between the two pools based on the percentage of spacing unit they cover. The percentages are based on the dedicated acreage in each pool. This is technically more correct, because if you have Units and Lots the percentages allocated will be based on the dedicated acreage in each pool.

Mike

From: John Austin Akers [<mailto:aakers@logosresourcesllc.com>]
Sent: Thursday, April 30, 2015 3:06 PM
To: McMillan, Michael, EMNRD; Pickford, Katherine, EMNRD
Cc: Tamra Sessions
Subject: RE: LOGOS NSL/NSP application- Brannon 292H

Hi Mike,

Here is the mailing information- I also a notice to Energen (proof of mailing also attached)

John "Austin" Akers
Vice President of Land- Logos Resources, LLC
P:615-523-2661 F: 303-974-1767

From: McMillan, Michael, EMNRD [<mailto:Michael.McMillan@state.nm.us>]
Sent: Thursday, April 30, 2015 2:16 PM
To: John Austin Akers; Pickford, Katherine, EMNRD
Cc: Tamra Sessions
Subject: RE: LOGOS NSL/NSP application- Brannon 292H

Who the rest of Section 30, excluding the SW/4, unless an existing well is the Basin Mancos exists in that section? We have 50% and Energen has 50% in the SE/4- I thought since the encroachment would not be within 660' of the SE/4 it would not be an issue?

Thanks