

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

Ken McQueen
Cabinet Secretary

Matthias Sayer
Deputy Cabinet Secretary

Heather Riley, 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 3160-4 or 3160-5 form.

Operator Signature Date: 8/3/2018

Well information:

API WELL #	Well Name	Well #	Operator Name	Type	Stat	County	Surf_Owner	UL	Sec	Twp	N/S	Rng	W/E
30-045-21358-00-00	NAVAJO TRIBAL U	016	Tacitus, LLC	O	A	San Juan	N	C	16	26	N	18	W

Application Type:

- ☐ P&A ☐ Drilling/Casing Change ☐ Location Change
- ☐ Recomplete/DHC (For hydraulic fracturing operations review EPA Underground injection control Guidance #84; Submit Gas Capture Plan form prior to spudding or initiating recompletion operations)
- ☒ Other: Record Clean up, Sundry received after work performed.

Conditions of Approval:

- Tacitus failed to receive OCD approval prior to performing the Horizontal drilling and plugback on the lateral portion of this well as required by 19.15.7.14 (**SUNDRY NOTICES AND REPORTS ON WELLS**) and 19.15.7.11 (**UNITED STATES GOVERNMENT LEASES**).
- The OCD is opting **NOT** to issue a **NOTICE OF VIOLATION** at this time for the failure to comply with OCD Rule 19.15.7.14 NMAC and 19.15.7.11.
 - Be advised that if Tacitus LLC fails to receive OCD approval prior to commencing operations in the future for work detailed in 19.15.7.14, Tacitus LLC may be subject to formal enforcement action.

NMOCD Approved by Signature

10/25/18
Date

Powell, Brandon, EMNRD

From: John Thompson <john@walsheng.net>
Sent: Thursday, October 4, 2018 2:04 PM
To: Powell, Brandon, EMNRD
Subject: [EXT] RE: Navajo Tribal U #16 API 30-045-21358
Attachments: approved U#16 Horizontal Well Sundry.pdf

This is what I have. Let me know if you need anything else.

Thanks,

John C. Thompson
Walsh Engineering & Production Corp

O 505.327.4892
C 505.320.1748
E john@walsheng.net

From: Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>
Sent: Thursday, October 4, 2018 10:23 AM
To: John Thompson <john@walsheng.net>
Subject: Navajo Tribal U #16 API 30-045-21358

As discussed can you send over the approvals for the original Horizontal drilled portion of the well which was plugged back on 9/10/18.

Thank You

Brandon Powell
I & E Supervisor
New Mexico Oil Conservation
Office: (505) 334-6178 ext. 116

"He who wishes to gain knowledge is wiser than he who thinks he has knowledge (unknown)"

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

AUG 07 2013

FORM APPROVED
OMB No. 1004-0135
Expires: January 31, 2004

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
Tacitus, LLC

3a. Address
2100 Cortland Drive, Farmington, NM 87401

3b. Phone No. (include area code)
403-400-0459

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 16 T26N R18W; NENW 760' FNL & 2040' FWL
36.493580 N Lat, 108.765900 W Long

5. Lease Serial No.
14-20-603-5034

6. If Indian, Allottee or Tribe Name
Navajo

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

8. Well Name and No.
Navajo Tribal "U" 16

9. API Well No.
30-045-21358

10. Field and Pool, or Exploratory Area
Tocito Dome

11. County or Parish, State
San Juan, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input checked="" type="checkbox"/> New Construction	<input checked="" type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Drill lateral out existing casing
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Tacitus, LLC intends to whipstock out of the existing 7" casing and drill a horizontal lateral through the Mississippian formation and test for Helium potential. The current plan (which may change once CBI and pressure test information is obtained) is to:

- 1) Set Whipstock at ~ 5907' and mill window through existing 7" casing.
- 2) Drill 6-1/8" curve to top of Mississippian formation and run 5-1/2", P110, 17 ppf, Modified Buttress Casing w/ S.C. couplings
- 3) Drill 4-3/4" lateral through Mississippian formation and run 3-1/2" pre-perforated/slotted liner to cover open hole, utilizing hydraulic disconnect to leave in place.
- 4) Run 5-1/2" packer and 2-3/8" tubing and test well for helium production

Attachments:

C102
Draft Directional Plan

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

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

John C. Thompson

Title Agent/Engineer for Tacitus, LLC

Signature

Date

08/03/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title PE

Date

8/22/18

Conditions of approval, if any, are attached. Approval of this notice 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.

Office FTO

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.

(Instructions on page 2)

OPERATOR

DISTRICT I
1825 N. French Dr., Hobbs, N.M. 88240
Phone: (576) 393-8181 Fax: (575) 393-0720

DISTRICT II
811 S. First St., Artesia, N.M. 88210
Phone: (576) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-6178 Fax: (505) 334-8170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, 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 30-045-21358	² Pool Code	³ Pool Name NORTH TOCITO DOME-MISSISSIPPIAN
⁴ Property Code	⁵ Property Name NAVAJO TRIBAL "U"	⁶ Well Number 16
⁷ OGRID No. 372957	⁸ Operator Name TACITUS, LLC	⁹ Elevation 5800'

¹⁰ Surface Location

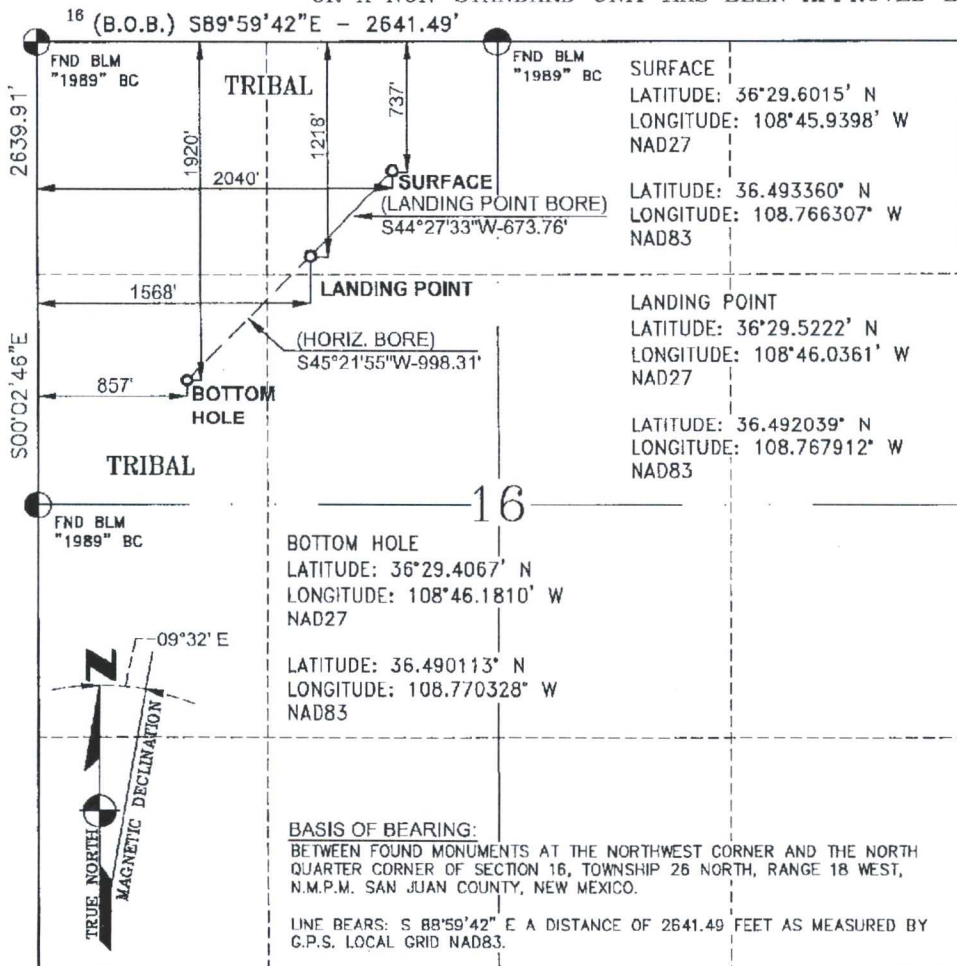
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	16	26-N	18-W		737	NORTH	2040	WEST	SAN JUAN

¹¹ 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
E	16	26-N	18-W		1920'	NORTH	857'	WEST	SAN JUAN

¹² Dedicated Acres NTD-M 320.00 ACRES N/2	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



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 unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or a working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

John C. Thompson
Signature Date 8/7/12
John C. Thompson
Printed Name
john@waleheng.net
E-mail Address

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.

AUGUST 7, 2018

Date of Survey

Signature and Seal



GLEN W. RUSSELL

Certificate Number

15703



Seidel Technologies
www.seideltech.com

Tacitus Venture Corp.

San Juan Couty NW

Sec 16 T26N R18W

Navajo Tribal U #16

Hz Re-Entry

UWI:

API:

Plan: #1

Seidel Tech Planning Report

17 July, 2018





Project: San Juan County NW
 Site: Sec 16 T26N R18W
 Well: Navajo Tribal U #16
 Wellbore: Hz Re-Entry
 Plan: #1



Azimuths to True North
 Magnetic North: 0.00°

Magnetic Field
 Strength: 0.0anT
 Dip Angle: 0.00°
 Date: 17/07/2018
 Model: USER DEFINED

Well Centre Reference
 Geodetic System: Flat Earth
 Ellipsoid: WGS 1984
 Zone: No Conversions
 Northing: 0.00
 Easting: 0.00
 Latitude: 40° 43' 27.480 N
 Longitude: 106° 21' 38.187 W
 Grid Convergence: 0.00° West
 Ground Elevation: 5799.0
 KB Elevation: RKB @ 5812.0usft (kb,13)

Formation Tops
 TVDPath 6800.0 MDPath 6857.2 Formation Mississippian

PLAN DETAILS

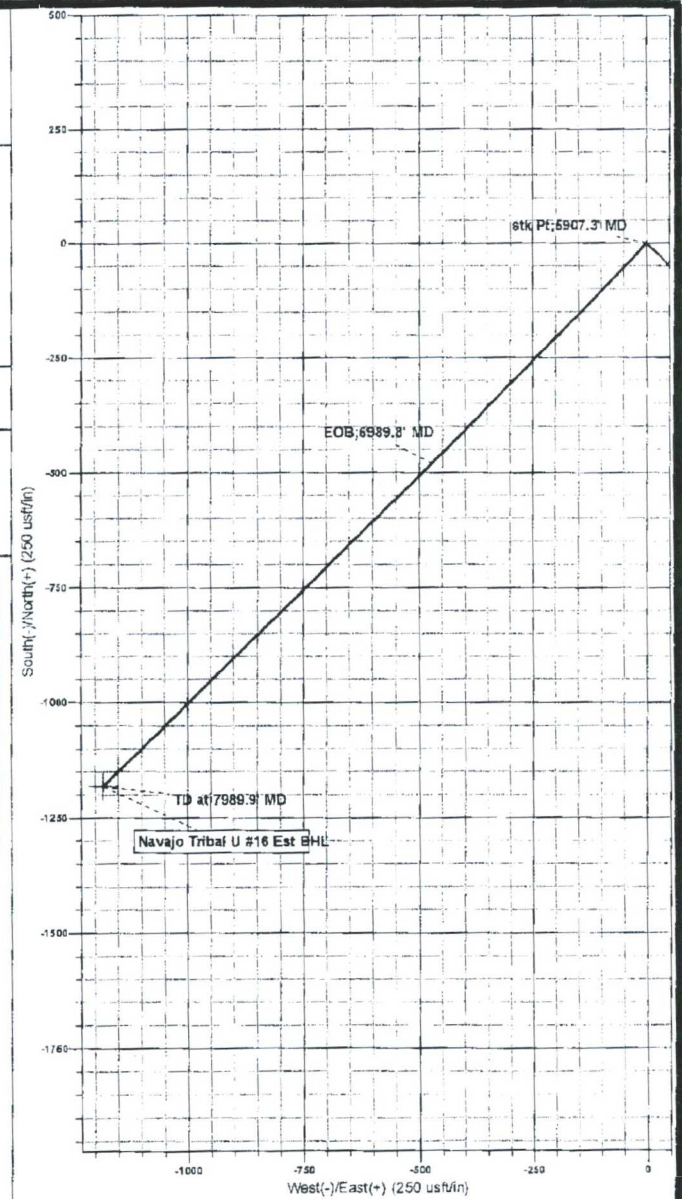
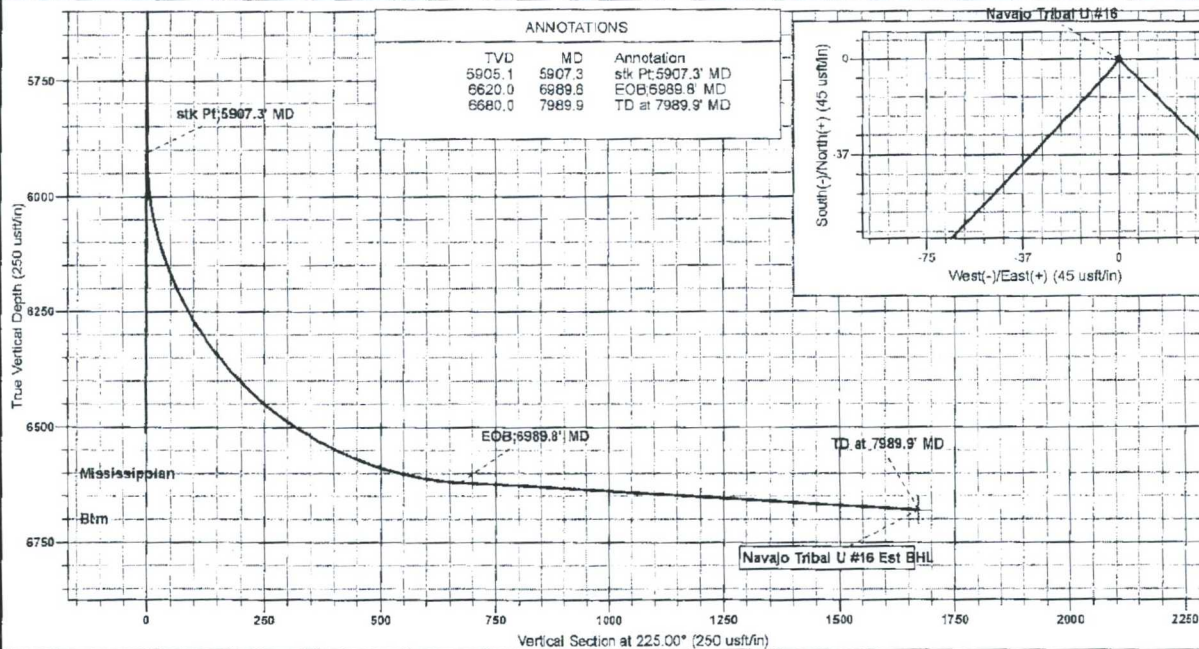
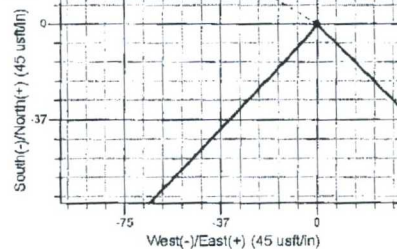
Sec	MD	Inc	Azi	TVD	+N/S	+E/W	Diag	TFace	VSecl	Target
1	5907.3	0.5	135.00	5905.1	0.0	0.0	0.00	0.00	0.0	
2	6989.8	85.6	225.00	6620.0	-480.9	-471.9	8.00	90.03	673.7	
3	6999.1	85.6	225.37	6620.6	-487.5	-478.4	4.00	95.78	683.0	
4	7989.9	88.8	225.37	6680.0	-1192.3	-1182.3	0.00	0.00	1672.0	Navajo Tribal U #16 Est BHL

Navajo Tribal U #16 Est BHL

ANNOTATIONS

TVD	MD	Annotation
5905.1	5907.3	stk Pt:5907.3' MD
6620.0	6989.8	EOB:6989.8' MD
6680.0	7989.9	TD at 7989.9' MD

Navajo Tribal U #16





Planning Report



Database	WellPlan Services	Location/Well Reference	Well Navajo Tribal U #16
Company	Tacitus Venture Corp.	VD Reason	RKB @ 5812.0usft (kb;13')
Project	San Juan Couty NW	VD Reason	RKB @ 5812.0usft (kb;13')
Site	Sec 16 T26N R18W	North Reference	True
Well	Navajo Tribal U #16	Survey Calculation Method	Minimum Curvature
Wellbore	Hz Re-Entry		
Design	#1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
stk PL:5907.3' MD										
5,907.3	0.5	135.00	5,905.1	93.1	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	7.4	220.86	5,997.6	185.6	-4.9	-3.6	6.0	8.00	7.43	92.62
6,100.0	15.4	223.06	6,095.5	283.5	-19.5	-17.0	25.8	8.00	7.99	2.20
6,200.0	23.4	223.77	6,189.7	377.7	-43.6	-39.8	59.0	8.00	8.00	0.72
6,300.0	31.4	224.14	6,278.4	466.4	-76.7	-71.8	105.0	8.00	8.00	0.37
6,400.0	39.4	224.37	6,359.9	547.9	-118.2	-112.2	162.9	8.00	8.00	0.23
6,500.0	47.4	224.53	6,432.4	620.4	-167.2	-160.3	231.6	8.00	8.00	0.16
6,600.0	55.4	224.66	6,494.7	682.7	-222.8	-215.1	309.7	8.00	8.00	0.13
6,700.0	63.4	224.76	6,545.6	733.6	-283.9	-275.6	395.7	8.00	8.00	0.10
6,800.0	71.4	224.85	6,584.0	772.0	-349.4	-340.7	487.9	8.00	8.00	0.09
Mississippian										
6,857.2	76.0	224.90	6,600.0	788.0	-388.3	-379.4	542.8	8.00	8.00	0.08
6,900.0	79.4	224.93	6,609.1	797.1	-417.9	-408.9	584.6	8.00	8.00	0.08
EOB:5989.8' MD										
6,989.8	86.6	225.00	6,620.0	808.0	-480.9	-471.9	673.7	8.00	8.00	0.08
6,999.1	86.6	225.37	6,620.6	808.6	-487.5	-478.4	683.0	4.00	-0.40	3.99
7,000.0	86.6	225.37	6,620.6	808.6	-488.1	-479.1	683.9	0.00	0.00	0.00
7,100.0	86.6	225.37	6,626.6	814.6	-558.2	-550.1	783.7	0.00	0.00	0.00
7,200.0	86.6	225.37	6,632.6	820.6	-628.4	-621.2	883.5	0.00	0.00	0.00
7,300.0	86.6	225.37	6,638.6	826.6	-698.5	-692.2	983.4	0.00	0.00	0.00
7,400.0	86.6	225.37	6,644.6	832.6	-768.6	-763.2	1,083.2	0.00	0.00	0.00
7,500.0	86.6	225.37	6,650.6	838.6	-838.7	-834.3	1,183.0	0.00	0.00	0.00
7,600.0	86.6	225.37	6,656.6	844.6	-908.9	-905.3	1,282.8	0.00	0.00	0.00
7,700.0	86.6	225.37	6,662.6	850.6	-979.0	-976.3	1,382.6	0.00	0.00	0.00
7,800.0	86.6	225.37	6,668.6	856.6	-1,049.1	-1,047.4	1,482.4	0.00	0.00	0.00
7,900.0	86.6	225.37	6,674.6	862.6	-1,119.2	-1,118.4	1,582.3	0.00	0.00	0.00
TD at 7989.9' MD										
7,989.9	86.6	225.37	6,680.0	868.0	-1,182.3	-1,182.3	1,672.0	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
hit/miss target									
Shape									
Navajo Tribal U #16 Est	0.0	0.00	6,680.0	-1,182.3	-1,182.3	-1,182.28	-1,182.28	0° 0' 0.000 N	0° 0' 0.000 E
- plan hits target center									
- Point									

Formations							
Measured Depth (usft)	Vertical Depth (usft)	Subsea Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
6,857.2	6,600.0	-788.0	Mississippian		0.00		



Drawn by	WellPlan Services	Local Coordinates	Well Navajo Tribal U #16
Company	Tacitus Venture Corp.	TVB Reference	RKB @ 5812.0usft (kb;13')
Project	San Juan Couty NW	MD Reference	RKB @ 5812.0usft (kb;13')
Sheet	Sec 16 T26N R18W	North Reference	True
Well	Navajo Tribal U #16	Survey Calculation Method	Minimum Curvature
Wellbore	Hz Re-Entry		
Design	#1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		HN-S (usft)	1E-9W (usft)	
5,907.3	5,905.1	0.0	0.0	stk Pt;5907.3' MD
6,989.8	6,620.0	-480.9	-471.9	EOB;6989.8' MD
7,989.9	6,680.0	-1,182.3	-1,182.3	TD at 7989.9' MD

BLM CONDITION OF APPROVAL

CASING REPAIR, WORKOVER AND RECOMPLETION OPERATIONS:

1. If casing repair operations are needed, obtain prior approval from this office before commencing repairs. If a CBL or other logs are run, provide this office with a copy.
2. After any casing repair operations, test cement squeeze to a minimum of 500# for 30 minutes with no more than 10 % pressure fall off in the 30 minute test period. Provide test chart with your subsequent report of operations
3. A properly functioning BOP and related equipment must be installed prior to commencing workover, casing repair, and/or recompletion operations.
4. Contact this office at (505) 564-7750 prior to conducting any cementing operations

SPECIAL STIPULATIONS:

1. Pits will be fenced during work-over operation.
2. All disturbance will be kept on existing pad.
3. All pits will be pulled and closed immediately upon completion of the recompletion and work-over activities.
4. Pits will be lined with an impervious material at least 12 mils thick.