Submit 1 Copy To Appropriate District Office	State of New Mo	xico	Form C-103				
District 1 - (575) 393-6161	Energy, Minerals and Natu	ral Résources	Revised July 18, 2013				
1625, N. French Dr., Hobbs, NM 88240 District II – (575) 748-1283			WELL API NO. 30-015-43040				
811 S. First St., Artesia, NM 88210	OIL CONSERVATION		5. Indicate Type of Lease				
District III - (505) 334-6178	1220 South St. Fran	ncis Dr.	STATE STEE				
. 1000 Rio Brazos Rd., Aztec, NM 87410 District IV = (505) 476-3460	Santa Fe, NM 87	7505	6. State Oil & Gas Lease No.				
1220 S. St. Francis Dr., Santa Fe, NM 87505		,					
	ICES AND REPORTS ON WELLS		7. Lease Name or Unit Agreement Name				
(DO NOT USE THIS FORM FOR PROPO DIFFERENT RESERVOIR. USE "APPLIC	SALS TO DRILL OR TO DEEPEN OR PLU CATION FOR PERMIT" (FORM C-101) FO	JG BACK TO A	MIDNIGHT SUN 2 26 27				
PROPOSALS.)  1. Type of Well: Oil Well	Gas Well  Other		8. Well Number #5H				
2. Name of Operator			9. OGRID Number				
CHEVRON USA INC  3. Address of Operator	***************************************		4323				
	BS, NM 88240		10. Pool name or Wildcat DELAWARE RIVER;BONE SPRING				
4. Well Location			DELAWARE RIVER, BONE SFRING				
	175' feet from the NORTH	line and 775'	feet from the <u>WEST</u> line				
Section 02	Township 26S Ran		NMPM County EDDY				
Section 02	11. Elevation (Show whether DR,		Note to County EDD1				
	3222' GL						
12. Check A	Appropriate Box to Indicate N	ature of Notice, F	Report or Other Data				
NOTICE OF IN	ITENTION TO:	99112	SEQUENT REPORT OF:				
PERFORM REMEDIAL WORK	PLUG AND ABANDON	REMEDIAL WORK					
TEMPORARILY ABANDON	CHANGE PLANS	COMMENCE DRIL					
PULL OR ALTER CASING	MULTIPLE COMPL	CASING/CEMENT	JOB 🗍				
DOWNHOLE COMMINGLE							
CLOSED-LOOP SYSTEM	( <del></del> 1	OTUED.					
OTHER:  13. Describe proposed or comp	leted operations. (Clearly state all r	OTHER:	give pertinent dates, including estimated date				
			pletions: Attach wellbore diagram of				
proposed completion or rec	ompletion.	•	-				
	INS ON PERFORMING A BRADE						
WORKOVER PROCEDUI		URE WITH RAND	Y DADE, PLEASE FIND ATTACHED				
WORKOVEKTROCESON	XE.		NM OIL CONSERVATION				
			ARTESIA DISTRICT				
			SEP 3 0 2015				
			RECEIVED				
Spud Date:	Rig Release Da	te:					
'			·				
I hereby certify that the information	above is true and complete to the be	est of my knowledge	and belief.				
$\Lambda + 0$	0.0						
SIGNATURI-LINGS Nama-1	Murillo TITLE PERMITT	ING SPECIALIST	DATE09/30/2015				
Type or print name <u>CINDY HERR</u>	ERA-MURILLO E-mail address:	Cherreramurillo@c	hevron.com PHONE: 575-263-0431				
For State Use Only	\	7 (20)					
ABBROVED BY.	MCLL min /	)5TH V.	(XX) US(12 4/30/2015				
APPROVED BY: Conditions of Approval (if any):	TITLE &	ورس المار	- CO SUBATE 1/30/000				



API #: 30-015-43040 CHEVNO: PE6514

Operator: Chevron Midcontinent, L.P.

Location: 32.078363 N 104.166561 W Sec.2 Township: 26S Range: 27E

Spud: <u>6/9/2015</u> Completion: <u>9/3/2015</u>

# Chevron USA Inc. Mid-Continent Business Unit



**NM OIL CONSERVATION** 

ARTESIA DISTRICT

SEP 3 0 2015

RECEIVED

# **WORKOVER PROCEDURE**

# Midnight Sun #5H - Bradenhead Squeeze

Eddy County, New Mexico Level 1 Well Work - Remedial Cementing

Title	Name: Signature
Workover Engineer	Bob Hall
Workover Team Lead	Kyle Olree
Production Engineer	John Taxiarchou



Well Name: Midnight Sun 2-26-27 5H API#: 30-015-43040 CHEVNO: PE6514

Operator: Chevron Midcontinent, L.P.

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The purpose of this project is to execute a bradenhead squeeze into the 5-1/2" X 9-5/8" casing annulus.

This procedure is meant to be a guide only. It is up to the WSM, Workover Engineer and Production Engineer to make the decisions necessary to do safely what is best for the well. PLEASE REFER TO THE H2S SHEET AND TAKE ALL NECESSARY PRECAUTIONS TO MITIGATE THAT AND ANY OTHER RISKS.

Contacts: John Taxiarchou (PE) 432-687-7213, 432-664-7631 (C)

Danny Lovell (OS) 575-390-0866, 575-263-0401 (C)

Eli Barakat (PTL) 575-602-2995, 575-263-0446 (C)

Emanuel Jimenez (ALCR) 575-263-0411, 575-631-9139 (C)

Bob Hall (WE) 432-687-7243, 432-312-7283 (C) Kyle Olree (TTL) 432-687-7422, 307-922-3098 (C)

Victor Bajomo (DS) 432-687-7953, 432-202-3767 (C)

Joe Garcia (FS) 575-631-9016 (C) James Konen (FS) 575-390-8428 (C)

# Background

An ultrasonic log ran on the 5-1/2" 17# production casing on 9/28/2015 shows a top of cement at approximately 6,060'. The intermediate casing, 9-5/8" 40# HCK-55 with ID = 8.835" is set at 7540'. Open Hole below that is 8-3/4". The well was completed and put on production in September 2015, but was shut-in after two days production due to a buildup of pressure and a water flow coming from the 5-1/2" X 9-5/8" annulus.

In the past two weeks it was observed that the intermediate casing had ~120 psi on it. Originally, 20 bbl water were recovered from the water flow from the intermediate casing. After bleeding off the casing, water will continue to flow from the intermediate casing annulus at ~ 1 - 2 bph rate if the valve is left open and monitored. In a review of the history of the well, it is noted that there was an attempt to impose and maintain pressure on the 5-1/2" X 9-5/8" annulus during fracing of the well, but the annulus did not load up with 40 bbl water pumped and only pressured up to 500 psi due to friction that would drop off as soon as pumping ceased.

It appears that the 5-1/2" X 9-5/8" annulus will take fluid. A pump test was executed on 9/25/2015 that verified the 5-1/2" X 9-5/8" annulus will take fluid. After loading the annulus and pumping 40 BBL fresh water at 0.5 to 1.5 BPM rates, approximately 40 BBL fresh water was pumped at 2 BPM at a pressure of 579 - 485 psi.

This remedial cement job (bradenhead squeeze) is intended to isolate the backside and stop the water flow.

The NMOCD District 2 Artesia office (575-748-1283) must provide permission to perform the bradenhead squeeze before the job is executed. An approved NMOCD cementing procedure must be in place before the job is executed.

Basic Energy Services will prepare a remedial cement job proposal prior to pumping the job. Basic's contact person is Erick Aranda (432-687-1994) at the Midland office.



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# **WELLBORE DIAGRAM**

WellView wellbore detail included at the end of this procedure.

IMPORTANT NOTE: This tubing detail, excerpted below and attached to this procedure (Baker, dated September 1, 2015) is the most accurate known detail of tubing.

		•			Date:	September 1, 20		
Согорану: <u>С</u> п	evron			Co. Rep.:				
Losse & Wel	No.	Midnight	Sun 2-20	j-27		Well #:	5H	
County	State							
Popular	5(x2	Weight	Grade	Depth	TOC	KB	23	
Seriaca ermediata	enistanoi en					PBTD. TD.		
roduction						4	Constitution of the last of th	
Liner								

Length	Prom	70	Pracription	ÖÞ	Ø)
23.00	-	23.00	X8		
22,64	23.00	\$5.54	1-2.075 h	3,650	2.441
10.40	55.64	66.04	1-2.075 pup h	3.650	2,441
6.10	56,04	transmission of the same and	1-2.878 pup  f	3.650	2.441
#383.26	72.14		257-2.076 jis	3.650	2.441
1.50	8,455,40	8,450.90	1- L10 on/off tool w/ 2.313 "K" profile nippte	4.500	7.313
7.63	8,466.90	8,444,83	1-460 Harnot packer	4.600	2.370
6,10	8,464.53	8,470.60	1-2.875 pup jt	3.650	2.441
1.15	8,470.63	8,471,78	1-8XN 2.208 NG	3.709	2.208
4.10	8,471.78	8,475.88	1-2.678 pup J	3.660	2.441
0.50	8,475.48	8,476.38	t-pump out plug	3.700	2.447



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# PRE-WORK:

1. Complete the rig move checklist. Verify power line route survey with Hobbs FMT.

- 2. Ensure location is in appropriate condition, anchors have been tested within the last 24 months, and power line distance has been verified to determine if a variance and RUMS are necessary.
- When NU anything over an open wellhead (EPA, etc.) ensure the hole is covered to avoid dropping anything downhole.
- Review H2S calculations in H2S tab included.
- Any equipment installed at the wellbore, including wellhead (Inside Diameter), is to be visually inspected by the WSM to insure no foreign debris or other restrictions are present.
- 6. DO NOT! Flow back CO2 to non CO2 rated vessels.

# PROCEDURE:

# SET BLANKING PLUG, BLEED WELL DOWN, PULL TUBING, SET RBP & PACKER

- MIRU Slickline Unit. RIH with gauge ring (Drift of Tubing is 2.347" / Profile Nipple is 2.313" X Profile) to top of Profile Nipple @ 8,455.40'. If successful, set blanking plug in Profile Nipple.
- 8. Bleed well down.
- 9. Verify that well does not have pressure or flow. If the well has pressure, note tubing and casing pressures on WellView report. Bleed down well; if necessary, kill with cut brine fluid (8.6 ppg).
- 10. MIRU pulling unit and surface equipment.
- 11. Monitor well for 30 minutes to ensure it is dead.
- 12. If hanger (with BPV profile) was landed in tubing head, install BPV through tubing and seat in tubing hanger. Strip over tubing with Chevron Class II rated 7-1/16" 5M remotely-operated hydraulically-controlled BOP configured with pipe rams over blind rams and flange up to tubing head. NU environmental protection pan and rig up rig floor. Test BOP pipe rams to 250 low for 5 min / 500 psi high for 10 min. Record test pressures in WellView. Remove BPV. Release tubing at On-Off tool on packer and TOH to lay down tubing hangar.
- 13. If hinged slip-type hanger was used, remove wellhead top nut, top packing ring and packing rubbers above slips and install 7-5/8", 8rd (or as required) screw on x 7-1/16", 5M companion flange to head. NU Chevron Class II rated 7-1/16" 5M remotely-operated hydraulically-controlled BOP configured with pipe rams over blind rams. NU environmental protection pan. RU floor and unseat hangar. Release tubing at On-Off tool on packer and TOH w/ hanger and 1 joint tubing. PU 5-1/2" test packer for 5-1/2", 17# casing and TIH-with test packer to approximately 25', set packer and test BOPE to 250 low for 5 min / 500 psi high for 10 min. Record test pressures in WellView. Release and LD test packer and make up original top joint of tubing back to tubing string.



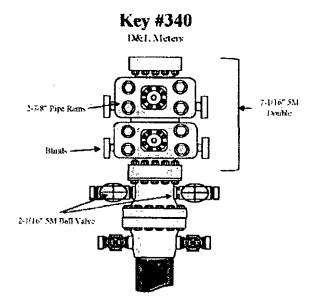
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Keep the charted test of the BOP supplied by the vendor for the entire job.



Caliper elevators and tubular EACH DAY prior to handling tubing/tools.

Note in JSA when and what items are callipered within the task step that includes that work.

- 14. POOH and stand back 2-7/8" production tubing.
- 15. Visually inspect production tubing and segregate any tubing that must be replaced:
- 16. RIH and set 5-1/2" RBP @ 8,300'. (Wireline or tubing set RBP is OK.)
- 17. Dump 3 sacks (300# pounds total) down 5-1/2" casing to cover RBP with at least 20' sand.
- 18. PU 5-1/2" PKR. Set packer @ ± 60': Shut well in with ability to monitor tubing and annulus pressure while shut in.



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# PUMP BRADENHEAD PUMP TEST

- 19. Verify that the 5-1/2" X 9-5/8" annulus will take fluid prior to pumping cement by conducting the following Bradenhead Pump Test:
  - A. Record pressure on annulus between production casing and intermediate casing. Also, look for any changes in pressure at the surface casing or the production casing during the execution of the pump testing.
  - B. Blow down the pressure from the 5-1/2" X 9-5/8" annulus.
  - C. Grab samples of any liquid that flows back.
  - D. Arrange with Hector Espinoza, Baker Hughes Upstream Chemicals at (575) 390-8193 to take the samples for analysis.
  - E. After well has been blown down or at least stabilized with pressure/flow after about 30 minutes, shut annulus in.
  - F. Record ISIP, 5 minute, 10 minute, 15 minute, and other pressure readings to demonstrate pressure build-up for a total shut-in time of 1 hour.
  - G. After 1 hour shut-in, blow down the pressure from the annulus.
  - H. Fill the 5-1/2" x 9-5/8" annulus with fresh water. Pump into one side of the wellhead and open the annulus valve on the opposite side of the wellhead (pinch back the valve as necessary). Allow any air to be displaced with the fresh water.
  - I. When annulus is filled, close the valve used to bleed air from the annulus.

(For the Midnight Sun #5H 5-1/2" X 9-5/8" annulus, use a maximum of approximately 50 BBL fresh water to fill the annulus and clear air pockets, It is possible that the annulus may not support a consistent hydrostatic head of fluid at surface.)

Commence with pump test in next step.

- J. With fresh water, pump down the annulus recording:
  - i. Rate;
  - ii. Pressure; and



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# iii. Volume Pumped.

- K. Total volume to pump down the annulus will be approximately 50 BBL fresh water.
- L. Maximum pressure is 1,500 psi.
- M. Initial pump rate should be 0.5 BPM. Look for any occurrence of well pressuring up or breaking back.
- N. Increase pump rate in 0.5 BPM increments up to a rate of 2.0 BPM.
- O. If climbing to max pressure (1,500 psi), try to allow for pumping about 20 BBL fresh water at the max pressure.
- P. After pumping approximately 50 BBL fresh water, shut down pumps.
- Q. Record ISIP, 5 minute, 10 minute, and 15 minute pressure readings.
- R. Bleed pressure off of the annulus or at least allow to drop to pre-job pressure recorded in Step #1.
- S. Return well to original condition.

# DECISION POINT - CONFIRM SCOPE AND READINESS FOR BRADENHEAD SQUEEZE

- 20. Workover Engineer will finalize the cement job with Basic Energy Services to specify:
  - Quantity of cement to be pumped; and
  - Pump schedule for the job.
- 21. Provide final cement specifications to WSM.
- 22. WSM to verify logistics with Basic Energy Services to confirm:
  - A site plan to accommodate equipment placement and connections between pumps, water source, bulk cement, wellhead, and tanks for fluid returns from well;
  - > Delivery of adequate cement and pumping equipment to location; and
  - Delivery of sufficient quantity of water on location. Water to be:



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- A. Tested compatible for mixing cement via field blend test; and
- B. Pre-mixed with biocide.
- 23. Preliminary Calculations for size of cement job are as follows:
  - Volumes
    - A. 5-1/2" casing inside 9-5/8" 40# casing to 6.060'
      - 1. Capacity factor is 0.0464 BBL/ft
      - 2. Net footage: 6,060'
      - 3. About 10% excess added.
      - 4. 300 BBL
    - B. Total volume of cement to be pumped as per preliminary design:
      - 1. 300 BBL
      - 2. Volume and # of sx cement to be confirmed prior to pumping.

# REMEDIAL CEMENT JOB - BRADENHEAD SQUEEZE

Notify the NMOCD – Artesia Office (575-748-1283) at least 24 hours before performing Bradenhead Squeeze.

Midnight Sun 2-26-27 #5H Well Construction Details: 9-5/8" Intermediate Casing Burst @ 3,950 psi (100%) 5-1/2" Production Casing Collapse @ 8,580 psi (100%)

# Maximum Pressure for Remedial Cement Job is 2,000 psi.

- 24. MIRU BASIC cement unit, RU lines to 9-5/8" casing riser. Make sure to have return lines (wash up after the job) going to open top tank (OTT) for visual inspection. Ensure that the casing riser and valves are rated to 5,000 psi.
- 25. Test surface lines to 250 psi low and 3,000 psi high. Set pump kick-outs at 2,000 psi.
- Establish and maintain a pressure of 500 psi inside the 5-1/2" casing during the pumping of the remedial cement job.
- 27. Open valve on 9-5/8" casing and pump as per the pump schedule: (See Basic Energy Services Quote: Midnight Sun 2-26-27 #5H "Bradenhead Squeeze from 9,168" to Surface")
  - a. Start with the 50 bbls water ahead (Mud Flush), establish injection during the same.
  - b. Pump 10 bbls calcium chloride water, followed by 5 bbls fresh water spacer, followed by 15 bbls of sodium silicate, and then 5 bbls water spacer. Ensure sodium silicate is isolated to the suction side of one pump (don't put thru mix system or centrifugal).
  - c. Pump cement and hesitate squeeze as follows:
    - i. Pump volume to shoe at 3 bpm or max injection rate.



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ii. Slow rate down to 0.5 - 1 bpm and pump to estimated TOC.

- iii, Shut down for 5 minutes and monitor pressure. If well goes on vacuum then shut down for 30 minutes and allow cement to fall / start to get up.
- iv. Pump slowly until you catch up the pressure again and for last 15 bbls, pump in steps of 5 bbls and shut down for 5 min before pumping next 5 bbls and so on, while continuing to monitor pressure.
- 28. Monitor pressure throughout job; do not exceed 2,000 psi surface pressure.
- 29. If pressure reaches initial injection pressure, wash up and attempt to pump 1 bbt down riser to clear. If well is still on vacuum at end of job, do not fill up, but allow cement to fall and find a level.
- 30. Flush all the lines to OTT, add sugar to the OTT before or during flushing. RDMO cementing unit. Note: Try to haul off the flushed cement soon to avoid any issues.
- 31. Wait for at least 48 hours for cement to set.

# **RUN RCBL/CCL/GR LOG**

- 32. Insure well is dead.
- 33. Release 5-1/2" PKR set @ 60'. POOH, standing back production tubing & laying down PKR.
- 34. MIRU Wireline Unit, 5M Lubricator & WL BOP.
- 35. Pressure test lubricator to 250 psi low / 4,000 psi high:
- 36. Run Radial CBL/GR/CCL log from ~8200' to surface. Report the results to Engineer immediately to plan on future work. Document top of cement on Morning report.
- 37. POOH with wireline. Secure well and RDMO WL unit.
- 38. Discuss future plans with Production Engineer and Workover Engineer.

# PULL RBP, RUN PRODUCTION TBG & RETURN TO PRODUCTION

- 39. PU Retrieving Head on production tubing and RIH to top of sand.
- RU Reverse Unit to circulate sand from top of RBP.
- Latch on and retrieve RBP. POOH standing back production tubing. LD RBP and Retrieving Head.
- 42. Re-mobilize and RU hydrotesters. PU On/Off Tool and RIH on production tubing.
- 43. RIH and tag On/Off tool and space out tubing.
- 44. PU and circulate well with packer fluid.



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- 45. Latch onto On/Off Tool, set string in compression and land tubing hanger in Wellhead.
- 46. ND BOPE, NU WH.
- 47, RDMO Workover Unit.
- 48. Install Lubricator on wellhead.
- 49. MIRU Slickline Unit.
- 50. Retrieve blanking plug.
- 51. Unload tubing
- 52. Contact appropriate Field Specialist to remove locks.
- 53. Clean location, RDMO PU. Notify ALCR and production personnel workover has been completed. Complete Workover Ownership Form, turn well back to production (contacts on first page). Make sure to send completed Workover Ownership Form to RHBZ@chevron.com.
- 54. Indicate \*\*\*\*Final Report\*\*\* on WellView time log and operations summary.

# References:

MCBU DC SOP A006 - Elevator Inspection and Change Out Log

MCBU DC SOP A008 - Well Control

MCBU DC SOP C004 - Well Handover version 1.0 Approved

MCBU DC SOP D001 - BOP Pressure Testing

MCBU DC.SOP W002 - Flow Back of Energized Fluids

MCBU DC SOP W003 - Workover Barrier 1.0

Well Control Handbook - Version 1.3

Restraint of Temporary Pressurized Lines - February 2015



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# STANDARD GUIDELINES

# Maximum Anticipated H2S Exposures (RRC H9 / NM Rule 36 )

All personnel on location must be made aware of each of the following values (values vary by field):

Maximum anticipated amount of H2S that an individual could be exposed to is 10 ppm
at the maximum anticipated escape volume (of wellbore gas) of 1000 MCF/D
100 ppm Radius of Exposure is 6 feet.
500 ppm Radius of Exposure is 3 feet.

### **Flevators**

At every tubing size change, the elevators must be calipered and all lifting equipment must be visually inspected for the correct sizing, and rechecked daily. The elevators must also be checked for proper sizing by placing a pony sub in the elevators. Prior to picking up power swivel, caliper and visually inspect elevators and bail on swivel. Checks are to be documented in the JSA and elevator log.

# ND/NU

Prior to N/D, N/U operations, if only one mechanical barrier to flow will be in place, visual monitoring of well condition by the WSM is necessary for 30 minutes or more to ensure that the well is static <u>before</u> removing or replacing well control equipment. For all deviations to 2B policy, check that MOC for exemption from 2B policy is in place and applicable. During ND/NU operations with only one barrier to flow in-place, constant visual monitoring of well condition <u>during ND/NU</u> by the WSM is necessary.

# Installed Equipment

Any and all equipment installed at the surface on the wellbore is to be visually inspected (internally) by the WSM prior to N/U to the wellhead by the service provider to ensure no debris or other potential restrictions are present. During any NU ops over an open wellhead (BOP, EPA, etc.), ensure the hole is covered to avoid dropping anything downhole.

# Hazard ID

Identify hazards with the crew as they come up during the job. Stop and review and discuss JSAs.

# Scale and Paraffin Samples

When removing rods and/or tubing from a well, collect samples of any paraffin and/or scale.

When drilling, note, report and sample significant returns of scale or paraffin, or anything other significant returns. Assume that samples that come from different areas/environments in the well are different and require a different sample; e.g. top/bottom of well, inside outside of tubing. Always collect enough sets of samples for both Production and D&C Chemical Reps. Send any samples to Chemical Reps., both for

- 1) Production (many times Baker), as well as for
- 2) D&C (many times PetroPlex).

Discuss D&C's Chemical Rep's recommendations with Engineering, or simply implement as practical.

# Trapped Pressure

Recognize whether the possibility of trapped pressure exists, check for possible obstructions by:

- Pumping through the fish/tubular this is not guaranteed with an old fish as the possibility of a hole above the
  obstruction could yield inconclusive results
- Dummy run make a dummy run through the fish/tubular with sandline, slickline, e-line or rods to verify no
  obstruction. If unable to verify that there is no obstruction above the connection to be broken, or if there is an
  obstruction:
- Hot Tap at the connection to check for pressure and bleed off
- Observe and watch for signs / indicators of pressure as connection is being broken. Use mud bucket (with seals removed) and clear all non-essential personnel from the floor.



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# Wireline

For all wireline and slickline jobs (except in new, cemented, tested and unperforated casing) install wireline packoff and lubricator. Follow Standard Guideline for installing equipment over wellhead. Test to 250 on the low end, and test on the high end based on SITP or max, anticipated pressure. Establish exclusion zone around wellhead area. Observe and enforce radio silence as needed for explosives. All wireline tools are to be calipered and documented on a diagram prior to PU and RIH. This is critical information in the event of fishing operations.

# Foam clean out hazard mitigation

- Install flowback manifold with two chokes. All components on flowback manifold must be rated to at least 5,000 psi. If possible, flowback manifold components should be hydrotested before delivery.
- 2 Run dart type float in bit sub bored for a float. Install open top flowback tank downwind from rig.
- 3 NU stripper head with <u>NO Outlets</u> (Check stripper cap for thread type course threads preferred). Stripper head to be stump tested to 1,000 psi before use for foam operations.
- 4 Clear floor of all personnel while breaking circulation and anytime they are not required.
- 5 Pump high quality foam at all times. Do not pump dry air at any time. Fluid injection rates will generally be above 12 gallons per minute
- Whenever there is pressure on the stripper head, have a dedicated person continuously monitor pressure at choke manifold and have a dedicated person at accumulator ready to close annular BOP in case stripper leaks.
- 7 Do not allow pressure on stripper head to exceed 500 psi. If pressure cannot be controlled below 500 psi, stop pumping, close BOP and bleed off pressure.
- 8 Ensure that high quality, stiff foam is pumped while circulating in lateral. Stiff foam is required to prevent segregation while circulating along lateral. Monitor flow and pressures carefully when cleaning out the lateral as well will begin to unload very rapidly when foam "turns the corner".
- 9 Before rigging up power swivel to rotate, carefully inspect Kelly hose to ensure that it is in good condition. Ensure that swivel packing is in good condition. Visually inspect and caliper elevators and bail on swivel.
- 10 POOH LD workstring & bit. Pump kill fluid down tubing to put tubing on vacuum to help eliminate trapped pressure before breaking out string floats. Have foam-air hand on location during this process. He should employ a special tool to check for pressure under floats.



# Chevron Midnight Sun 2-26-27 # 5H

County/State Eddy, NM Legal Loc. --

Bradenhead Squeeze From 6,200' To Surface

Terms: Prepared for Robert Hall

Phone Number: Fax Number:

Email Address: Erick.Aranda@Basicenergyservices.com

Prepared by Erick Aranda Basic Energy Services Inc. 432-634-8081

Service Point: Midland, TX 1721 Contact Person: Erick Aranda 432-687-1994

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