

<b>District I</b> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 <b>District II</b> 811 S. First St., Artesia, NM 88210 Phone:(505) 412-2800 Fax:(505) 412-0720 <b>District III</b> 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6170 Fax:(505) 334-6170 <b>District IV</b> 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3479 Fax:(505) 476-3462	<b>State of New Mexico</b> <b>Energy, Minerals and Natural Resources</b> <b>Oil Conservation Division</b> <b>1220 S. St Francis Dr.</b> <b>Santa Fe, NM 87505</b>	Form C-103 August 1, 2011  Permit 201226  WELL API NUMBER 30-015-41046  5. Indicate Type of Lease S  6. State Oil & Gas Lease No.  7. Lease Name or Unit Agreement Name SKEEN 2 26 27 STATE  8. Well Number 001H  9. OGRID Number 4323  10. Pool name or Wildcat
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**SUNDRY NOTICES AND REPORTS ON WELLS**  
 (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: O	8. Well Number 001H
2. Name of Operator CHEVRON U S A INC	9. OGRID Number 4323
3. Address of Operator Attn: Sandy Stedman-Daniel, 1400 Smith, Houston, TX 77002	10. Pool name or Wildcat
4. Well Location Unit Letter <u>D</u> : <u>175</u> feet from the <u>N</u> line and feet <u>400</u> from the <u>W</u> line Section <u>2</u> Township <u>26S</u> Range <u>27E</u> NMPM County <u>Eddy</u>	
11. Elevation (Show whether DR, KB, BT, GR, etc.) 3226 GR	

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit Type \_\_\_\_\_ Depth to Groundwater \_\_\_\_\_ Distance from nearest fresh water well \_\_\_\_\_ Distance from nearest surface water \_\_\_\_\_  
 Pit Liner Thickness: \_\_\_\_\_ mil Below-Grade Tank Volume \_\_\_\_\_ bbls; Construction Material \_\_\_\_\_

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> CHANGE OF PLANS <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPL <input type="checkbox"/> Other: _____	SUBSEQUENT REPORT OF: REMEDIAL WORK <input type="checkbox"/> ALTER CASING <input type="checkbox"/> COMMENCE DRILLING OPNS. <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> CASING/CEMENT JOB <input type="checkbox"/> Other: <b>Drilling/Cement</b> <input checked="" type="checkbox"/>
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13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work.) SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.  
 07/13/2014 through 07/17/2014: Drill 142-493. SET 13 3/8" CSG @ 493'. Cmt w/515 sx Cl C cmt. Circ 112 sx to surf. 07/20/2014 through 07/21/2014: Drill 567-2279'. Set 9 5/8" csg @ 2279'. Cmt w/850 sx Cl H cmt. Circ 219 sx to surf. 07/24/2014 through 08/05/2014: Drill 2279-12,905' TD. Ran 5 1/2" csg set @ 12,878. Cmt w/2135 sx cmt. 100 sx cmt to surface. 08/09/2014: Release Rig @ 06:30 hrs. 7/11/2014 Spudded well.

**Casing and Cement Program**

Date	String	Fluid Type	Hole Size	Csg Size	Weight lb/ft	Grade	Est TOC	Dpth Se'	Sacks	Yield	Class	1" Dpth	Pres Held	Pres Drop	Open Hole
08/07/14	Prod		8.75	5.5	17	P-110	0	12878	2135						
07/17/14	Surf		17.5	13.375	48	H-40	0	493	515	1.347	C				
07/21/14	Int1		12.25	9.625	40	HCK-55	0	2279	850	1.326	H				

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOC guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE _____	TITLE _____	DATE _____
Type or print name _____	E-mail address _____	Telephone No. _____

**For State Use Only:**  
 APPROVED BY: [Signature] TITLE Dist II Supervisor DATE 3/24/2015



# Summary Report

Drill  
Drill and Suspend  
Job Start Date: 7/8/2014  
Job End Date: 8/9/2014

Well Name SKEEN 2-26-27 ST 001H		Lease Skeen 2-26-27	Field Name Delaware River	Business Unit Mid-Continent	
Ground Elevation (ft) 3,226.00	Original RKB (ft) 3,257.00	Current RKB Elevation 3,257.00, 3/13/2014		Mud Line Elevation (ft)	Water Depth (ft)

Report Start Date: 7/8/2014

Com

Move miscellaneous equipment and tubulars. 30% moved, 20% rigged down.

Report Start Date: 7/9/2014

Com

Waiting on daylight.

Complete rig down and move 90% of equipment. Set in pumps, pits, VFD and sub bases. Set in 20% of equipment 10% rigged up.

Waiting on daylight

Report Start Date: 7/10/2014

Com

Waiting on daylight

Continue Rigging up on Skeen 1-H. 100 % moved off Skeen 4-H. 90% set in, 40 % rigged up.

Waiting on daylight.

Report Start Date: 7/11/2014

Com

Wait on Daylight

Continue R/U of equipment. 100% set in on Skeen 1H and 75% R/U on Skeen 1H

Wait on Daylight

Report Start Date: 7/12/2014

Com

Wait on Daylight

Continue R/U equipment. Tested top drive, function test all equipment, N/U conductor, changed out swivel packing.

Report Start Date: 7/13/2014

Com

Continue R/U of miscellaneous equipment on rig.

Lay out and strap BHA

P/U BHA and start TIH. Tag bottom at 142'

Drill from 142' to 213'.

Rotating Parameters

AROP = 28 ft/hr

WOB = 6 - 10 K

TD RPM = 39

GPM = 225 GPM

SPP = 120 psi

Diff P = 50 psi

MW = 8.4 ppg

TD Torque = 4250 ft-lbs

Report Start Date: 7/14/2014

Com

Drill from 213' to 480'.

Rotating Parameters

AROP = 25 ft/hr

WOB = 10 - 20 K

TD RPM = 65

GPM = 330 GPM

SPP = 325 psi

Diff P = 50 psi

MW = 8.4 ppg

TD Torque = 5250 ft-lbs

Circulate hole pumping sweeps as necessary. Determine washout to be 24 bbls.

TOH w/ BHA from 480' to surface. L/D bit, bit sub, and shock sub. Survey = 2.83 deg

N/D conductor pipe. Change out bales and elevators

Hold PJSM on R/U Express equipment and on RIH w/ casing

R/U Express Casing crew

RIH w/ 13-3/8" surface casing down to 164'. Once at 164', casing would not go any further.

Lay out casing to remove centralizers and attempt to re-run in hole.

RIH w/ 13-3/8" casing to 164' where well bridged over.

Lay out casing from 164' up to float collar. Attempted to back out of casing, failed due to thread lock.

Report Start Date: 7/15/2014

Com

Wait on welder to arrive to location.



# Summary Report

Drill  
Drill and Suspend  
Job Start Date: 7/8/2014  
Job End Date: 8/9/2014

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Ground Elevation (ft) 3,226.00	Original RKB (ft) 3,257.00	Current RKB Elevation 3,257.00, 3/13/2014		Mud Line Elevation (ft)	Water Depth (ft)

Com  
Have PJSM w/ rig crew and welder prior to heating up casing threads to break casing and float collar.  
Shut down due to weather (lightning).  
Have welder heat up shoe track and break casing and float collar. Lay down last of casing.  
N/U conductor and clean rig floor.  
Change out bales and elevators  
P/U, strap, and M/U 17-1/2" bit and BHA  
TIH down to 155'.  
Ream out bridge at 155' to 164'. Continue TIH and reaming down to bottom at 480'.  
Circulate and condition hole clean, pumping sweeps as necessary. Spot 100 bbl pill at bottom.  
TOH from 480' up to 164'. Ream from 164' up to 155'. Continue TOH from 155' up to surface.  
R/D bales and elevators, clear rig floor, N/D conductor  
PJSM w/ Express casing crew and rig crew prior to R/U of equipment and RIH w/ casing.  
R/U Express casing crew and equipment  
RIH w/ 13-3/8" casing down to 164' and encounter tight spot again. Begin working through tight spot and reaming with Texas pattern guide shoe on end of casing.

Report Start Date: 7/16/2014

Com  
Wash and ream casing down from 164' down to 170'.  
POOH and lay out casing, using welder to heat up threads.  
R/D Express casing crew and equipment  
Rig service  
Wait on 17-3/8" stabilizer to arrive on location  
P/U and M/U 17-1/2" bit, BHA, and drill string  
TIH w/ drill string and bit down to 150'  
Wash and ream from 150' down to 230'.  
R/U and run wireline survey. Shoot surveys at: 220' was 3.11 deg, 150' was 2.96 deg, and 100' was 1.25 deg.  
TIH from 220' down to 480'. Ream through tight spots at 350' to 355' and from 450' to 480'.  
Pump sweep around to clean out hole

Report Start Date: 7/17/2014

Com  
Finish pumping sweeps to clean hole after reaming down to bottom at 480'.  
Make short trip while reaming from 480' up to 140'. Ream out tight spot at 420'.  
Circulate and clean hole, pumping sweeps as necessary. Spot 100 bbl pill on bottom.  
TOH w/ drill string from 480' up to surface.  
Clean and clear rig floor  
Have PJSM w/ Express and rig crew prior to R/U of equipment and RIH w/ casing.  
R/U Express casing crew and equipment.  
RIH w/ 10 jts of 13-3/8" surface casing to 462' and land WH.  
R/D Express casing crew and equipment.  
R/U HAL cement crew and equipment.  
Have PJSM w/ HAL cement crew and rig crew prior to R/U of equipment and pumping of cement  
Pump surface cement job as per Chevron and HAL plan.  
R/D HAL cement crew and equipment.  
R/D casing bales and elevators  
Clean and clear rig floor  
Remove mouse hole, prep for N/D landing joint, transfer fluid out of pits, clean sand trap  
N/D landing joint and lay down  
N/U and Dress out WH  
Raise and set stack. Torque up bolts. Install: choke line, check valve, kill line, and turnbuckles. Charge up accumulator and function test.

Report Start Date: 7/18/2014

Com  
Finish N/U BOP  
R/U Man Welding BOP test equipment  
Test pump manifold lines. Test standard pipe rams to 250 psi low and 5000 psi high. Test hydraulic IBOP and manual IBOP to 250 psi low and 5000 psi high. BOP rams to 250 psi low and 5000 psi high. Hydril to 250 psi low and 3500 psi high. Choke manifold to 250 psi low and 5000 psi high. All tests were good.  
Rig down BOP testing equipment

13 3/8" C 493  
Surface csg  
515 SX C  
14.8 PPG, 1.347 yield  
Circ 112 SX to Surg



# Summary Report

Drill  
Drill and Suspend  
Job Start Date: 7/8/2014  
Job End Date: 8/9/2014

Well Name SKEEN 2-26-27 ST 001H		Lease Skeen 2-26-27	Field Name Delaware River	Business Unit Mid-Continent	
Ground Elevation (ft) 3,226.00	Original RKB (ft) 3,257.00	Current RKB Elevation 3,257.00, 3/13/2014		Mud Line Elevation (ft)	Water Depth (ft)

Com	
Test Casing 1200 psi for 30 min.	
Make-up flowline, Install mousehole, Change rotating head clamp, Install katch can around BOPs.	
Install Wear Bushing.	
Service Rig.	
Change out broken bolt on Top Drive grab box.	
Have PJSM w/ HAL-sperry and rig crew prior to P/U of directional BHA	
Start P/U of HAL-sperry directional BHA	
Report Start Date: 7/19/2014	
Com	
Finish P/U and M/U of directional tools	
TIH w/ BHA and tag TOC @ 339'	
Perform choke drill w/ rig crew	
Drill from 339' to 490'.	
Rotating Parameters AROP = 60 ft/hr WOB = 5 - 10 K TD RPM = 45 GPM = 400 GPM SPP = 465 psi Diff P = 325 psi MW = 10.1 ppg MMotor = 68 rpm TD Torque = 2650 ft-lbs	
Perform FIT test to 13.6 ppg, test was good	
Drill from 490' to 567'.	
Rotating Parameters AROP = 20 ft/hr WOB = 5 - 15 K TD RPM = 55 GPM = 450 GPM SPP = 675 psi Diff P = 195 psi MW = 10.1 ppg MMotor = 77 rpm TD Torque = 5500 ft-lbs	
Rig Service	
Drill from 567' to 826'.	
Rotating Parameters AROP = 37 ft/hr WOB = 20 - 25 K TD RPM = 70 GPM = 545 GPM SPP = 1315 psi Diff P = 205 psi MW = 10.1 ppg MMotor = 93 rpm TD Torque = 6925 ft-lbs	
Drill from 826' to 1068'.	
Rotating Parameters AROP = 40 ft/hr WOB = 20 - 30 K TD RPM = 70 GPM = 545 GPM SPP = 1425 psi Diff P = 325 psi MW = 10.1 ppg MMotor = 93 rpm TD Torque = 8575 ft-lbs	
Report Start Date: 7/20/2014	



# Summary Report

Drill  
Drill and Suspend  
Job Start Date: 7/8/2014  
Job End Date: 8/9/2014

Well Name SKEEN 2-26-27 ST 001H		Lease Skeen 2-26-27	Field Name Delaware River	Business Unit Mid-Continent	
Ground Elevation (ft) 3,226.00	Original RKB (ft) 3,257.00	Current RKB Elevation 3,257.00, 3/13/2014		Mud Line Elevation (ft)	Water Depth (ft)

Com

Drill and slide from 1086' to 1113'.

Rotating Parameters  
AROP = 54 ft/hr  
WOB = 20 - 30 K  
TD RPM = 70  
GPM = 545 GPM  
SPP = 1425 psi  
Diff P = 325 psi  
MW = 10.1 ppg  
MMotor = 93 rpm  
TD Torque = 8575 ft-lbs

Install rotating head

Drill from 1113' to 1304'.

Rotating Parameters  
AROP = 42 ft/hr  
WOB = 25 - 30 K  
TD RPM = 70  
GPM = 545 GPM  
SPP = 1475 psi  
Diff P = 335 psi  
MW = 10.1 ppg  
MMotor = 93 rpm  
TD Torque = 8500 ft-lbs

Drill and slide from 1304' to 1814'.

Rotating Parameters  
AROP = 43 ft/hr  
WOB = 20 - 30 K  
TD RPM = 70  
GPM = 545 GPM  
SPP = 1500 psi  
Diff P = 335 psi  
MW = 10.2 ppg  
MMotor = 93 rpm  
TD Torque = 8250 ft-lbs

Drill and slide from 1814' to 2197'.

Rotating Parameters  
AROP = 64 ft/hr  
WOB = 20 - 30 K  
TD RPM = 70  
GPM = 545 GPM  
SPP = 1350 psi  
Diff P = 335 psi  
MW = 10.2 ppg  
MMotor = 93 rpm  
TD Torque = 8500 ft-lbs

Report Start Date: 7/21/2014

Com

Drill from 2197' to 2257'.

Rotating Parameters  
AROP = 40 ft/hr  
WOB = 25 - 30 K  
TD RPM = 68  
GPM = 545 GPM  
SPP = 1535 psi  
Diff P = 315 psi  
MW = 10.2 ppg  
MMotor = 93 rpm  
TD Torque = 8250 ft-lbs

Circulate and condition hole, pumping sweeps as necessary. Determine washout to be 37 bbls. Flow check well and pump slug.

TOH from 2257' up to 502'

L/D 6-1/2" DC's, 8" DC's, DD tools, and bit



# Summary Report

Drill  
Drill and Suspend  
Job Start Date: 7/8/2014  
Job End Date: 8/9/2014

Well Name SKEEN 2-26-27 ST 001H		Lease Skeen 2-26-27	Field Name Delaware River	Business Unit Mid-Continent	
Ground Elevation (ft) 3,226.00	Original RKB (ft) 3,257.00	Current RKB Elevation 3,257.00, 3/13/2014		Mud Line Elevation (ft)	Water Depth (ft)

	Com
Clean and clear rig floor	
Pul wear bushing	9 5/8" CSG @ 2279
R/D bales and elevators	
Have PJSM w/ Express casing crew and rig crew prior to R/U of equipment and RIH w/ 9-5/8" casing	
R/U Express casing crew and equipment	7-21
RIH w/ jts of 9-5/8" casing down to 2247' and land 9-5/8" packoff	
R/D Express casing crew and equipment	
Circulate at 2253'	Head 610 SW H 1.326 field
Circulate while waiting on HAL Cement to fix their equipment	Tail 240 SW H
Have PJSM w/ HAL cement crew and rig crew prior to R/U of equipment and pumping cement	
Pump intermediate cement job as per Chevron plan. After pumping cement, flush lines w/ fresh water.	
Report Start Date: 7/22/2014	219 SW to surj
	Com
R/D Cement equipment and wash through BOPE.	
L/D landing joint. C/O bails and elevators.	
M/U pack off and attempt to set.	
Wait on GE pack off running tool.	
Attempt to set pack off.	
Attempt to flush cement from wellhead.	
L/D landing joint and R/D flow line, Katch Kan, and turn buckles.	
RIH and set RBP at 500'.	
R/D orbit valve. N/D BOPE.	
Report Start Date: 7/23/2014	
	Com
N/D B section of wellhead. Clean cement out of A section and B section of wellhead.	
Set pack-off. N/U B section and test 1/3,000 psi for 15 min.- good test.	
N/U BOPE.	
R/U Man Welding. PJSM with Man Welding and test BOPE 250 psi low and 5,000 psi high (3,500 psi on annular).. Hold each test 5 minutes and chart.	
N/U flow line, install mouse hole.	
Safety stand down w/ crew performed.	
Retrieve RBP.	
Clean rig floor.	
M/U wear bushing and install.	
L/O and strap BHA.	
Pick up BHA #5 as follows: 8 3/4" PDC bit (Ultrerra U616M), 6-3/4" 6/7 5.0 Stg ABH @ 1.83	
Install rotating head.	
TIH to 1,904'	
Report Start Date: 7/24/2014	
	Com
TIH and tag cement @ 2,146'.	
Perform choke drill.	
Test casing to 1500 psi. Good test.	
Drill shoe track and rat hole.	
Drill vertical section F/2,257' - T/2,267'.	
Perform FIT test @ 500 psi. to 13.5 EMW.	
Drill vertical section F/2,267' - T/2,495'.	
Ave. ROP = 76 fph, WOB= 15k, Diff = 250, RPM = 60, GPM = 550	
Change out shaker screens due to build up underneath screens.	
Drill vertical section F/2,495' - T/4545'.	
Ave. ROP = 128 fph, WOB= 27k, Diff = 350, RPM = 80, GPM = 580, SPP =1750,TQ = 8000	
Report Start Date: 7/25/2014	



# Summary Report

Drill  
Drill and Suspend  
Job Start Date: 7/8/2014  
Job End Date: 8/9/2014

Well Name SKEEN 2-26-27 ST 001H		Lease Skeen 2-26-27	Field Name Delaware River	Business Unit Mid-Continent	
Ground Elevation (ft) 3,226.00	Original RKB (ft) 3,257.00	Current RKB Elevation 3,257.00, 3/13/2014		Mud Line Elevation (ft)	Water Depth (ft)

Com					
Drill vertical section F/4,545' - T/4,771'.					
Ave. ROP = 90 fph, WOB= 27k, Diff = 350, RPM = 80, GPM = 580, SPP =1750,TQ = 8000					
Drill vertical section F/4,771' - T/5,320'.					
Ave. ROP = 64 fph, WOB= 27k, Diff = 200, RPM = 80, GPM = 436, SPP =1363 ,TQ = 10k					
Drill vertical section F/5,320' - T/5,634'.					
Ave. ROP = 52 fph, WOB= 27k, Diff = 200, RPM = 80, GPM = 580, SPP = 2050,TQ = 10k					
Rig service.					
Drill vertical section F/5,634' - T/5835'					
Ave. ROP = 31 fph, WOB= 32k, Diff = 80, RPM = 70, GPM = 580, SPP = 2050,TQ = 10k					
Report Start Date: 7/26/2014					
Com					
Drill vertical section F/5,865' - T/5,844'					
Avg. ROP = 18 fph, WOB= 34k, Diff = 80, RPM = 70, GPM = 580, SPP = 2050,TQ = 10k					
Circulate B/U					
Check Flow, Well Flowing 13 bbls./hr					
Circulate B/U through choke					
Check Flow, Well Flowing 13 bbls./hr @ 0 psi Csg					
Attempt to circulate and recieved H2S alarm. Shut in well and evacuate to muster area.					
Circulate through choke while raising MW to 9.4 and ph to 12.					
Check flow (well static), build and pump slug,					
TOH to change bit and mud motor.					
Change out mud motor, mwd tool, test mwd, and make up bit.					
TIH to 5,795'.					
Circulate B/U.					
Drill vertical section F/5,844' - T/6110					
Avg. ROP = 53 fph, WOB= 32 k, Diff = 200, RPM = 65, GPM = 586, SPP = ,TQ = 8k					
Report Start Date: 7/27/2014					
Com					
Drill vertical section F/6,110' - T/6,874'					
Avg. ROP = 51 fph, WOB= 32 k, Diff = 250, RPM = 80, GPM = 586, SPP = 2050 psi,TQ = 10k					
Service Top Drive					
Drill vertical section F/6,874' - T/7,256'					
Avg. ROP = 59 fph, WOB= 32 k, Diff = 350, RPM = 80, GPM = 586, SPP = 2150 psi,TQ = 10k					
Circulate B/U,					
Check flow & pump slug					
Report Start Date: 7/28/2014					
Com					
Pump slug.					
TOH for curve assembly.					
Lay down HW drill pipe and jars.					
Change out mud motor and MWD tool. Test same and make up bit.					
P/U 30 joints of drill pipe.					
TIH to 7,200'					
Circulate B/U.					
Drill 8 3/4" curve section F/7,256' - T/7,442'					
Avg. ROP = 24.8 fph, WOB= 38 k, Diff = 65, RPM = 60 , GPM = 544, SPP = psi,TQ = 19k					
CC - pump sweep and circ out					
Flow Check					
Pump Slug					



# Summary Report

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Well Name SKEEN 2-26-27 ST 001H		Lease Skeen 2-26-27	Field Name Delaware River	Business Unit Mid-Continent	
Ground Elevation (ft) 3,226.00	Original RKB (ft) 3,257.00	Current RKB Elevation 3,257.00, 3/13/2014		Mud Line Elevation (ft)	Water Depth (ft)

Report Start Date: 7/29/2014

Com

Weight mud to 9.4 due to well flowing 10 bbls/hr during flow check.  
Check flow. (well static)

TOH to 5,400' due to high torque and motor stalling.

Pull rotating head and install trip nipple.

TOH to directional BHA.

L/D directional BHA.

Strap and caliper drill collars and 5" drill pipe for clean out run with junk mill and boot basket.

P/U and rack back 3 stands of collars. P/U and rack back 12 stands of drill pipe with new hard band to run in lateral section.

TIH to 7403' with junk mill.

Circulate B/U

Ream from 7403' to 7440' - tagged @ 7440'

Washed bottom and cycled pumps to attempt to catch junk in Boot Basket.

tagged 7440' with 2K WOB - cycled pumps and @ 250, 350, and 500 GPM, allowing 5 min settle time with pumps off between each cycle.

Report Start Date: 7/30/2014

Com

Continue Mill run and attempt to catch junk in Boot Basket.

Circulate B/U

Flow Check and Pump Slug

TOH

Lay down 5" HWDP & 6-1/4" DC

P/U Dir. Tools

Change ST-80 dies

P/U MWD, test same, & M/U bit

TIH with Dir. assembly to 7,160'

Circulate B/U

Ream f/ 7,160' - t/ 7,442'

Slide & Rotate f/ 7,442' - t/ 7,506'

Avg. ROP = 64 fph, WOB= 25 k, Diff = 370, RPM = 25, GPM = 544, SPP = psi, TQ = 9k

TOH 5 stds and change out saver sub on the top drive. TIH to 7506'

Slide/Rotate from 7506' to 7605'

Avg. ROP = 40 fph, WOB= 25 k, Diff = 370, RPM = 25, GPM = 544, SPP = psi, TQ = 10.5k

Report Start Date: 7/31/2014

Com

Slide/Rotate from 7605' to 8144'

Curve Landed @ 8144' - 90.3° inc. / 179.6°

Avg. ROP = 47 fph, WOB= 25 k, Diff = 300, RPM = 25, GPM = 585, SPP = 2250 psi, TQ = 10.5k

Slide/Rotate from 8144' to 9301

Avg. ROP = 92.5 fph, WOB= 25 k, Diff = 300, RPM = 65, GPM = 585, SPP = 2250 psi, TQ = 16k

Report Start Date: 8/1/2014

Com

Slide/Rotate from 9,301' to 10,448'

Avg. ROP = 85 fph, WOB= 25 k, Diff = 400, RPM = 65, GPM = 585, SPP = 2250 psi, TQ = 16k

Rig service.

Slide/Rotate from 10,488' to 10,542'

Avg. ROP = 54 fph, WOB= 25 k, Diff = 400, RPM = 65, GPM = 585, SPP = 2250 psi, TQ = 16k

Work pipe, circulate, and pumps sweeps due to higher pick up weight.  
Note: P/U WT. was 310k, reduced to 280k.

Slide/Rotate from 10,542' to 11,113'

Avg. ROP = 71 fph, WOB= 25 k, Diff = 400, RPM = 65, GPM = 585, SPP = 2250 psi, TQ = 17k

Report Start Date: 8/2/2014





# Summary Report

Drill  
Drill and Suspend  
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Job End Date: 8/9/2014

Well Name SKEEN 2-26-27 ST 001H		Lease Skeen 2-26-27	Field Name Delaware River	Business Unit Mid-Continent	
Ground Elevation (ft) 3,226.00	Original RKB (ft) 3,257.00	Current RKB Elevation 3,257.00, 3/13/2014		Mud Line Elevation (ft)	Water Depth (ft)

Com

Slide/Rotate from 11,113' to 12,159'

Avg. ROP = 61.5 fph, WOB= 25 k, Diff = 400, RPM = 65 , GPM = 585, SPP = 2350 psi,TQ = 17k

Rig service

Slide/Rotate from 12,159' to 12,457'

Avg. ROP = 46 fph, WOB= 25 k, Diff = 400, RPM = 65 , GPM = 585, SPP = 2350 psi,TQ = 17k

Report Start Date: 8/3/2014

Com

Slide/Rotate from 12,457' to 12,905'

Avg. ROP = 49 fph, WOB= 25 k, Diff = 400, RPM = 65 , GPM = 585, SPP = 2350 psi,TQ = 17k

Perform clean up cycle and incorporate lubra beads into system.

Checkflow and pump slug.

TOH to 12,254'. Stuck pipe w/circulation.

Work stuck pipe.

Back ream F/12,125' - T/11,046'

Tight Hole issues at 11,735' and 11,046'

Report Start Date: 8/4/2014

Com

Back ream F/11,046' - T/10,900'

Perform cleanup cycle.

Back ream F/10,900' - T/9,290'

Service rig.

TOH from 9,290' to directional BHA.

Lay down directional BHA

Layout and strap BHA.

P/U reaming assembly.

TIH to 5844' w/ reaming assembly.

Report Start Date: 8/5/2014

Com

TIH F/ 5845' to 6875'.

Install Rotating Head

TIH F/ 6875' to 9135'.

Ream F/ 9135' to 12905'.

Circ. and Condition mud, Perform clean out cycle.

Attempt to pull 10 stands, Had to Back Ream first stand out of hole. Pooh next 9 stands with 120 k over. Unable to TIH without reaming. Continue TIH Reaming to 12905'. Circ. and Condition mud. Perform clean up cycle. Spot 200 bbl pill on bottom.

Pooh from 12905' to 7236'. Pulled first 10 stands with 80k to 120k over.

Report Start Date: 8/6/2014

Com

Pooh laying down Drill pipe f/ 7236' to 2326'.

TIH with 60 stands of drill pipe in derrick.

Pooh laying down Drill pipe f/ 7715' to 1185'

Remove Rotating head, Install trip nipple.

Pooh laying down Drill pipe.

Lay down bit, reamers & drill collars. Clean Rig floor.

Pull wear bushing.

Held pre-job safety meeting and Rig up Franks Casing equip.

Held safety meeting with Ensign and Franks on running 5.5" casing.

Report Start Date: 8/7/2014

Com

Run 5.5 " 17# ppf, HCP-110 Casing.

Ream Casing down from 11070' to 12120'.



# Summary Report

Drill  
Drill and Suspend  
Job Start Date: 7/8/2014  
Job End Date: 8/9/2014

Well Name SKEEN 2-26-27 ST 001H		Lease Skeen 2-26-27	Field Name Delaware River	Business Unit Mid-Continent	
Ground Elevation (ft) 3,226.00	Original RKB (ft) 3,257.00	Current RKB Elevation 3,257.00, 3/13/2014		Mud Line Elevation (ft)	Water Depth (ft)

Wash & Ream Casing down from 12120' to 12641'.  
T.D RPM: 40 , SPM: 70, Torque: 10,500,  
Rotate weight: 195,000, Overpull 40k - 85k

Report Start Date: 8/8/2014

Continue working Casing unable to get past 12641'. Build and spot 100 bbl Dril-n-Slide pill outside Casing . Shut down pumps attempt to Tih with Casing.  
Ream Casing from 12641' to 12886'.

Circulate and Condition mud thru CRT while Rig down Franks casing equip and Rig up Halliburton cement equip.

Rig down CRT tool.

Rig up Halliburton cement equip.

Held safety meeting on cementing

Perform cement job with Halliburton.

1) Pumped 20 bbl 10.6 ppg spacer. 2) 1115 sacks varicem -pb1 cement, yeild 2.54 . 3) 920 sacks varicem-pb2 cement, 1.807 yeild. 4) 100 sacks solucem- h cement, yeild 2.606. 5) 48 bbls 10% msa-acid, 8.48 ppg. Got 100 cement to surface. Bumped plug 500 psi over.

Flush through Bop's and all surface equip. Rig down cement equip.

Held safety meeting with crews and rig up Apollo E/Line and set Bridge plug in 5.5" casing at 2000'.

Nipple down Bop's

Set casing slips @120 k. Make rough cut and dress out top of casing. Set pack-off.

Nipple up DSA and 7 1/16" Tubing head.

Report Start Date: 8/9/2014

Nipple up Tubing head. Tested tubing head to 5000 psi.

Note: Could not get more than 1000 psi on Tubing head and emergency pack-off on first test. Opened casing valve bled off pressure ( pressure unknown didn't have gauge on casing at that point ) Tubing head tested to 5000 psi. After discusses with G.E Rep. discovered the hold down pins were approximately 1/2" from touching top of pack-off. Bled off pressure from Tubing head and closed casing valve installed gauge on casing. Pressure built up to 150 psi on casing. Re-tested Tubing head with pressure on casing to 5000 psi test good. Bled off pressure from casing and closed casing valve.

Release Rig @06:30



# Casing Summary

Well Name SKEEN 2-26-27 ST 001H		Lease Skeen 2-26-27		Field Name Delaware River		Business Unit Mid-Continent	
Ground Elevation (ft) 3,226.00	Original RKB (ft) 3,257.00	Current RKB Elevation 3,257.00, 3/13/2014				Mud Line Elevation (ft)	Water Depth (ft)

## Surface, Planned?-N, 493ftKB

Set Depth (MD) (ftKB) <b>493</b>		Set Tension (kips)		String Nominal OD (in) <b>13 3/8</b>		String Min Drift (in)		Centralizers		Scratchers	
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)	Len (ft)	P. Burst (psi)	P. Collapse (psi)
1	Landing Joint	13 3/8	12.719	48.00	H-40		31	61	30.15		
1	Pup Joint	13 3/8	12.719	48.00	H-40		61	66	4.65		
8	Casing Joint	13 3/8	12.719	48.00	H-40		66	410	344.09	1,730.0	740.0
1	Float Collar	13 3/8	12.719	48.00	H-40		410	411	1.06		
2	Casing Joint	13 3/8	12.719	48.00	H-40		411	492	81.44	1,730.0	740.0
1	Float Shoe	13 3/8	12.719	48.00	H-40		492	493	0.73	1,730.0	740.0

## Intermediate Casing 1, Planned?-N, 2,279ftKB

Set Depth (MD) (ftKB) <b>2,279</b>		Set Tension (kips)		String Nominal OD (in) <b>9 5/8</b>		String Min Drift (in) <b>8.688</b>		Centralizers <b>21</b>		Scratchers	
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)	Len (ft)	P. Burst (psi)	P. Collapse (psi)
1	Landing Joint	9 5/8	8.844	40.00	HCK-55		31	64	32.93		
1	Liner Pup Joint	9 5/8	8.844	40.00	HCK-55		64	69	4.83	3,950.0	4,230.0
55	Casing Joint	9 5/8	8.844	40.00	HCK-55		69	2,203	2,134.01	3,950.0	4,230.0
1	Float Collar	9 5/8	8.844	40.00	HCK-55		2,203	2,204	1.49		
2	Casing Joint	9 5/8	8.844	40.00	HCK-55		2,204	2,277	73.27	3,950.0	4,230.0
1	Float Shoe	9 5/8	8.844	40.00	HCK-55		2,277	2,279	1.63		

## Production Casing, Planned?-N, 12,878ftKB

Set Depth (MD) (ftKB) <b>12,878</b>		Set Tension (kips)		String Nominal OD (in) <b>5 1/2</b>		String Min Drift (in)		Centralizers		Scratchers	
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)	Len (ft)	P. Burst (psi)	P. Collapse (psi)
0	Casing Joint	5 1/2	4.892	17.00	P-110	CDC	31	31	0.00		7,480.0
0	Landing Hanger	5 1/2	4.892	17.00	P-110	CDC	31	31	0.00		7,480.0
17 6	Casing Joint	5 1/2	4.892	17.00	P-110	CDC	31	7,133	7,101.33		7,480.0
1	Marker Joint	5 1/2	4.892	17.00	P-110	CDC	7,133	7,142	9.03		7,480.0
13 7	Casing Joint	5 1/2	4.892	17.00	P-110	CDC	7,142	12,686	5,544.42		7,480.0
1	Pup	5 1/2	4.892	17.00	P-110	CDC	12,686	12,695	8.45		
1	RSI Sleeve	5 1/2	4.892	17.00	P-110	CDC	12,695	12,700	5.65		
1	Casing Joint	5 1/2	4.892	17.00	P-110	CDC	12,700	12,741	40.87		7,480.0
1	Blank Liner	5 1/2	4.892	17.00	P-110	CDC	12,741	12,750	8.46		
1	Landing Collar	5 1/2	4.892	17.00	P-110	CDC	12,750	12,751	1.57		
1	Casing Joint	5 1/2	4.892	17.00	P-110	CDC	12,751	12,792	40.62		7,480.0
1	Float Collar	5 1/2	4.892	17.00	P-110	CDC	12,792	12,794	2.00		
2	Casing Joint	5 1/2	4.892	17.00	P-110	CDC	12,794	12,876	82.50		7,480.0
1	Float Shoe	5 1/2	4.892	17.00	P-110	CDC	12,876	12,878	1.78		7,480.0



# Cement Summary

Surface Casing Cement

Well Name SKEEN 2-26-27 ST 001H	Lease Skeen 2-26-27	Field Name Delaware River	Business Unit Mid-Continent
Ground Elevation (ft) 3,226.00	Original RKB (ft) 3,257.00	Current RKB Elevation 3,257.00, 3/13/2014	Mud Line Elevation (ft) Water Depth (ft)

Original Hole			
Wellbore Name Original Hole	Directional Type Horizontal	Kick Off Depth (ftKB) 7,256	Vertical Section Direction (°) 181.13
Hole Size (in)	Act Top (ftKB)	Act Btm (ftKB)	
20	0.0	142.0	
17 1/2	142.0	480.0	
12 1/4	480.0	2,257.0	
8 3/4	2,257.0	12,905.0	

SH-2, Vetco Grey on <dtmstart>			
Type SH-2	Install Date		
Des	Make	Model	WP (psi)
			Service
			SN

Surface, Planned? N, 493ftKB			
Casing Description Surface	Wellbore Original Hole	Run Date 7/17/2014	Set Depth (MD) (ftKB) 493
Centralizers	Scratchers		
		Stick Up (ftKB) -30.9	Set Tension (kips)

Jts	Item Des	OD (in)	ID (in)	Wt (lb/m)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Landing Joint	13 3/8	12.719	48.00	H-40			30.15	31	61
1	Pup Joint	13 3/8	12.719	48.00	H-40			4.65	61	66
8	Casing Joint	13 3/8	12.719	48.00	H-40			344.09	66	410
1	Float Collar	13 3/8	12.719	48.00	H-40			1.06	410	411
2	Casing Joint	13 3/8	12.719	48.00	H-40			81.44	411	492
1	Float Shoe	13 3/8	12.719	48.00	H-40			0.73	492	493

Intermediate Casing 1, Planned? N, 2,279ftKB			
Casing Description Intermediate Casing 1	Wellbore Original Hole	Run Date 7/21/2014	Set Depth (MD) (ftKB) 2,279
Centralizers 21	Scratchers		
		Stick Up (ftKB) -30.8	Set Tension (kips)

Jts	Item Des	OD (in)	ID (in)	Wt (lb/m)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Landing Joint	9 5/8	8.844	40.00	HCK-55			32.93	31	64
1	Liner-Pup Joint	9 5/8	8.844	40.00	HCK-55			4.83	64	69
55	Casing Joint	9 5/8	8.844	40.00	HCK-55			2,134.01	69	2,203
1	Float Collar	9 5/8	8.844	40.00	HCK-55			1.49	2,203	2,204
2	Casing Joint	9 5/8	8.844	40.00	HCK-55			73.27	2,204	2,277
1	Float Shoe	9 5/8	8.844	40.00	HCK-55			1.63	2,277	2,279

Production Casing, Planned? N, 12,878ftKB			
Casing Description Production Casing	Wellbore Original Hole	Run Date 8/6/2014	Set Depth (MD) (ftKB) 12,878
Centralizers	Scratchers		
		Stick Up (ftKB) -31.3	Set Tension (kips)

Jts	Item Des	OD (in)	ID (in)	Wt (lb/m)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
0	Casing Joint	5 1/2	4.892	17.00	P-110		CDC	0.00	31	31
0	Landing Hanger	5 1/2	4.892	17.00	P-110		CDC	0.00	31	31
176	Casing Joint	5 1/2	4.892	17.00	P-110		CDC	7,101.33	31	7,133
1	Marker Joint	5 1/2	4.892	17.00	P-110		CDC	9.03	7,133	7,142
137	Casing Joint	5 1/2	4.892	17.00	P-110		CDC	5,544.42	7,142	12,686
1	Pup	5 1/2	4.892	17.00	P-110		CDC	8.45	12,686	12,695
1	RSI Sleeve	5 1/2	4.892	17.00	P-110		CDC	5.65	12,695	12,700
1	Casing Joint	5 1/2	4.892	17.00	P-110		CDC	40.87	12,700	12,741
1	Blank Liner	5 1/2	4.892	17.00	P-110		CDC	8.46	12,741	12,750
1	Landing Collar	5 1/2	4.892	17.00	P-110		CDC	1.57	12,750	12,751
1	Casing Joint	5 1/2	4.892	17.00	P-110		CDC	40.62	12,751	12,792
1	Float Collar	5 1/2	4.892	17.00	P-110		CDC	2.00	12,792	12,794
2	Casing Joint	5 1/2	4.892	17.00	P-110		CDC	82.50	12,794	12,876
1	Float Shoe	5 1/2	4.892	17.00	P-110		CDC	1.78	12,876	12,878



# Cement Summary

Surface Casing Cement

Well Name SKEEN 2-26-27 ST 001H	Lease Skeen 2-26-27	Field Name Delaware River	Business Unit Mid-Continent
Ground Elevation (ft) 3,226.00	Original RKB (ft) 3,257.00	Current RKB Elevation 3,257.00, 3/13/2014	Mud Line Elevation (ft) 3,257.00
			Water Depth (ft) 3,257.00

## Surface Casing Cement Casing 7/17/2014 12:00

Cementing Start Date 7/17/2014	Cementing End Date 7/17/2014	Wellbore Original Hole
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Evaluation Method Returns to Surface	Cement Evaluation Results Circulated 27 bbls (112 sacks) lead cement to surface
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Comment  
Pump 515 sacks of Cemex Premium plus C cement w/ 2% CaCl<sub>2</sub>. Mix w/ FW @ 8.33 ppg.

Pump Cement as Follows:

- 1) Pressure test lines to 2000 psi
- 2) Pump 20 bbls gel spacer
- 3) Pump 515 sacks of Premium Plus Cement w/ 2% CaCl<sub>2</sub> at 14.8 ppg 1.347 yield 6.39 gal/sk
- 4) Drop top plug and displace cmt w/ 61 bbls of FW at 8.33 ppg
- 5) Bump plug with 650 psi
- 6) Bleed off pressure - Floats held, had 2 bbl bleed back
- 7) Final circulating pressure prior to bumping plug 120 psi at 2 bpm

\*\*Note: Pumped 27 bbls (112 sacks) of cement to surface

Properties are:

Slurry Yield - 1.347 ft<sup>3</sup>/sk  
Slurry Density - 14.8 ppg  
Water Requirement - 6.39 gal/sack

1-0-0-0-ftKB					
Top Depth (ftKB) 0.0	Bottom Depth (ftKB) 0.0	Full Return? Y	Vol Cement Ret (bbl) 0	Top Plug? N	Bottom Plug? N
Initial Pump Rate (bbl/min) 3	Final Pump Rate (bbl/min) 3	Avg Pump Rate (bbl/min) 3	Final Pump Pressure (psi) 61.0	Plug Bump Pressure (psi)	
Pipe Reciprocated? N	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)	Pipe Rotated? N	Pipe RPM (rpm)	
Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)	Drill Out Diameter (in)	Drill Out Date	

Spacer				
Fluid Type Spacer	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl)
Estimated Top (ftKB) 0.0	Estimated Bottom Depth (ftKB) 0.0	Percent Excess Pumped (%)	Yield (ft <sup>3</sup> /sack)	Fluid Mix Ratio (gal/sack)
Free Water (%)	Density (lb/gal) 8.34	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives		
Add	Type	Conc

2-0-0-480.0ftKB					
Top Depth (ftKB) 0.0	Bottom Depth (ftKB) 480.0	Full Return? Y	Vol Cement Ret (bbl) 27.0	Top Plug? N	Bottom Plug? N
Initial Pump Rate (bbl/min) 4	Final Pump Rate (bbl/min) 0.5	Avg Pump Rate (bbl/min) 2	Final Pump Pressure (psi) 120.0	Plug Bump Pressure (psi) 139.0	
Pipe Reciprocated? N	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)	Pipe Rotated? N	Pipe RPM (rpm)	
Depth Tagged (MD) (ftKB) 339	Tag Method Drill Bit	Depth Plug Drilled Out To (ftKB) 490.0	Drill Out Diameter (in) 12.1/4	Drill Out Date 7/19/2014	

Lead				
Fluid Type Lead	Fluid Description	Quantity (sacks) 515	Class C	Volume Pumped (bbl) 123.0
Estimated Top (ftKB) 31.0	Estimated Bottom Depth (ftKB) 480.0	Percent Excess Pumped (%)	Yield (ft <sup>3</sup> /sack) 1.35	Fluid Mix Ratio (gal/sack) 6.39
Free Water (%)	Density (lb/gal) 14.80	Zero Gel Time (min)	Thickening Time (hr) 3:25	1st Compressive Strength (psi) 500.0

Cement Fluid Additives		
Add	Type	Conc
CaCl <sub>2</sub>	Accelerator	2.0

3-0-0-0-ftKB					
Top Depth (ftKB) 0.0	Bottom Depth (ftKB) 0.0	Full Return? N	Vol Cement Ret (bbl) 0	Top Plug? N	Bottom Plug? N
Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Avg Pump Rate (bbl/min)	Final Pump Pressure (psi) 650.0	Plug Bump Pressure (psi) 650.0	
Pipe Reciprocated? N	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)	Pipe Rotated? N	Pipe RPM (rpm)	
Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)	Drill Out Diameter (in)	Drill Out Date	



# Cement Summary

Surface Casing Cement

Well Name SKEEN 2-26-27 ST 001H		Lease Skeen 2-26-27	Field Name Delaware River	Business Unit Mid-Continent
Ground Elevation (ft) 3,226.00	Original RKB (ft) 3,257.00	Current RKB Elevation 3,257.00; 3/13/2014		Mud Line Elevation (ft)
				Water Depth (ft)

Displacement				
Fluid Type Displacement	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl)
Estimated Top (ftKB) 0.0	Estimated Bottom Depth (ftKB) 0.0	Percent Excess Pumped (%)	Yield (ft <sup>3</sup> /sack)	Fluid Mix Ratio (gal/sack)
Free Water (%)	Density (lb/gal) 8.33	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement/Fluid/Additives		
Add	Type	Conc







# Cement Summary

Intermediate Casing Cement

Well Name SKEEN 2-26-27 ST 001H	Lease Skeen 2-26-27	Field Name Delaware River	Business Unit Mid-Continent
Ground Elevation (ft) 3,226.00	Original RKB (ft) 3,257.00	Current RKB Elevation 3,257.00, 3/13/2014	Mud Line Elevation (ft) Water Depth (ft)

## Intermediate Casing Cement - Casing, 7/21/2014 21:30

Cementing Start Date 7/21/2014	Cementing End Date 7/21/2014	Wellbore Original Hole
Evaluation Method Returns to Surface	Cement Evaluation Results Circulated 65 bbls (219 sacks) lead cement to surface	

### Comment

Pump 610 sacks of Halcem w/ CaCl<sub>2</sub> and bentonite and pump 240 sacks of Halcem.

### Pump Cement as Follows:

- 1) Pressure test lines to 3500 psi
- 2) Pump 10 bbls fresh water spacer
- 3) Pump 20 bbls of Mud Flush III
- 3) Pump 610 sacks of Econocem w/ 4% Bentonite and 1% CaCl<sub>2</sub> at 13.7 ppg 1.668 yield 8.67 gal/sk
- 5) Pump 240 sacks of Halcem at 14.8 ppg 1.326 yield 6.34 gal/sk
- 5) Drop top plug and displace cmt w/ 165 bbls of FW at 8.33 ppg
- 6) Bump plug with 1127 psi (417 psi over final circulating pressure)
- 7) Bleed off pressure - Floats held, had 1 bbl bleed back
- 8) Final circulating pressure prior to bumping plug 710 psi at 2.5 bpm

\*\*Note: Pumped 65 bbls (219 sacks) of cement to surface

### Properties are:

Lead Slurry Yield - 1.668 ft<sup>3</sup>/sk  
Lead Slurry Density - 13.7 ppg  
Lead Water Requirement - 8.67 gal/sack  
Tail Slurry Yield - 1.326 ft<sup>3</sup>/sk  
Tail Slurry Density - 14.8 ppg  
Tail Water Requirement - 6.34 gal/sack

### 1. <depthtop> - <depthbtm> ftKB

Top Depth (ftKB)	Bottom Depth (ftKB)	Full Return?	Vol Cement Ret (bbl)	Top Plug?	Bottom Plug?
		N		Y	N
Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Avg Pump Rate (bbl/min)	Final Pump Pressure (psi)	Plug Bump Pressure (psi)	
5	5	5	115.0		
Pipe Reciprocated?	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)	Pipe Rotated?	Pipe RPM (rpm)	
N			N		
Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)	Drill Out Diameter (in)	Drill Out Date	

### Preflush

Fluid Type Preflush	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl)
				20.0
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft <sup>3</sup> /sack)	Fluid Mix Ratio (gal/sack)
Free Water (%)	Density (lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)
	8.40			

### Cement Fluid Additives

Add	Type	Conc

### 2. 0.0 - 1,241.0 ftKB

Top Depth (ftKB)	Bottom Depth (ftKB)	Full Return?	Vol Cement Ret (bbl)	Top Plug?	Bottom Plug?
0.0	1,241.0	Y	65.0	N	N
Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Avg Pump Rate (bbl/min)	Final Pump Pressure (psi)	Plug Bump Pressure (psi)	
7	7	7	268.0		
Pipe Reciprocated?	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)	Pipe Rotated?	Pipe RPM (rpm)	
N			N		
Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)	Drill Out Diameter (in)	Drill Out Date	

### Lead

Fluid Type Lead	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl)
		610	C	268.0
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft <sup>3</sup> /sack)	Fluid Mix Ratio (gal/sack)
0.0	1,241.0		1.67	8.67
Free Water (%)	Density (lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)
	13.70		4.00	500.0

### Cement Fluid Additives

Add	Type	Conc





# Cement Summary

Intermediate Casing Cement

Well Name SKEEN 2-26-27 ST 001H	Lease Skeen 2-26-27	Field Name Delaware River	Business Unit Mid-Continent
Ground Elevation (ft) 3,226.00	Original RKB (ft) 3,257.00	Current RKB Elevation 3,257.00, 3/13/2014	Mud Line Elevation (ft) Water Depth (ft)

3 1 241.0 2 257.0 ftKB					
Top Depth (ftKB) 1,241.0	Bottom Depth (ftKB) 2,257.0	Full Return? N	Vol Cement Ret (bbl) N	Top Plug? N	Bottom Plug? N
Initial Pump Rate (bbl/min) 7	Final Pump Rate (bbl/min) 7	Avg Pump Rate (bbl/min) 7	Final Pump Pressure (psi) 252.0	Plug Bump Pressure (psi)	
Pipe Reciprocated? N	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)	Pipe Rotated? N	Pipe RPM (rpm)	
Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)	Drill Out Diameter (in)	Drill Out Date	

Fluid Type Tail	Fluid Description	Quantity (sacks) 240	Class C	Volume Pumped (bbl) 252.0
Estimated Top (ftKB) 1,241.0	Estimated Bottom Depth (ftKB) 2,257.0	Percent Excess Pumped (%) 1:33	Yield (ft <sup>3</sup> /sack) 6.34	Fluid Mix Ratio (gal/sack) 500.0
Free Water (%)	Density (lb/gal) 14.80	Zero Gel Time (min)	Thickening Time (hr) 2.50	1st Compressive Strength (psi)

Cement Fluid Additives		
Add	Type	Conc

4 <depthtop> <depthbtm> ftKB					
Top Depth (ftKB)	Bottom Depth (ftKB)	Full Return? N	Vol Cement Ret (bbl) N	Top Plug? N	Bottom Plug? N
Initial Pump Rate (bbl/min) 5	Final Pump Rate (bbl/min) 2.5	Avg Pump Rate (bbl/min) 3.5	Final Pump Pressure (psi) 710.0	Plug Bump Pressure (psi) 1,127.0	
Pipe Reciprocated? N	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)	Pipe Rotated? N	Pipe RPM (rpm)	
Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)	Drill Out Diameter (in)	Drill Out Date	

Fluid Type Displacement	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl) 165.0
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft <sup>3</sup> /sack)	Fluid Mix Ratio (gal/sack)
Free Water (%)	Density (lb/gal) 8.34	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives		
Add	Type	Conc



# Cement Summary

Production Casing Cement

Well Name <b>SKEN 2-2627 ST.001H</b>	Lease <b>Skeen 2-26-27</b>	Field Name <b>Delaware River</b>	Business Unit <b>Mid-Continent</b>
Ground Elevation (ft) <b>3,226.00</b>	Original RKB (ft) <b>3,257.00</b>	Current RKB Elevation <b>3,257.00, 3/13/2014</b>	Mud Line Elevation (ft) <b></b>
			Water Depth (ft) <b></b>

<b>Original Hole</b>			
Wellbore Name <b>Original Hole</b>	Directional Type <b>Horizontal</b>	Kick Off Depth (ftKB) <b>7.256</b>	Vertical Section Direction (*) <b>181.13</b>
Hole Size (in)	Act Top (ftKB)	Act Btm (ftKB)	
20	0.0	142.0	
17 1/2	142.0	480.0	
12 1/4	480.0	2,257.0	
8 3/4	2,257.0	12,905.0	

<b>SH-2, Vetco Gray on dttmstart</b>			
Type <b>SH-2</b>	Install Date <b></b>		
Item Des	Make	Model	SN
		WP (psi)	Service

<b>Surface, Planned? N: 493ftKB</b>			
Casing Description <b>Surface</b>	Wellbore <b>Original Hole</b>	Run Date <b>7/17/2014</b>	Set Depth (MD) (ftKB) <b>493</b>
			Stick Up (ftKB) <b>-30.9</b>
			Set Tension (kips) <b></b>
Centralizers	Scratchers		

Qts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn SZ (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Landing Joint	13 3/8	12.719	48.00	H-40			30.15	31	61
1	Pup Joint	13 3/8	12.719	48.00	H-40			4.65	61	66
8	Casing Joint	13 3/8	12.719	48.00	H-40			344.09	66	410
1	Float Collar	13 3/8	12.719	48.00	H-40			1.06	410	411
2	Casing Joint	13 3/8	12.719	48.00	H-40			81.44	411	492
1	Float Shoe	13 3/8	12.719	48.00	H-40			0.73	492	493

<b>Intermediate Casing 1, Planned? N: 2,279ftKB</b>			
Casing Description <b>Intermediate Casing 1</b>	Wellbore <b>Original Hole</b>	Run Date <b>7/21/2014</b>	Set Depth (MD) (ftKB) <b>2,279</b>
			Stick Up (ftKB) <b>-30.8</b>
			Set Tension (kips) <b></b>
Centralizers	Scratchers		

Qts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn SZ (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Landing Joint	9 5/8	8.844	40.00	HCK-55			32.93	31	64
1	Liner Pup Joint	9 5/8	8.844	40.00	HCK-55			4.83	64	69
55	Casing Joint	9 5/8	8.844	40.00	HCK-55			2,134.01	69	2,203
1	Float Collar	9 5/8	8.844	40.00	HCK-55			1.49	2,203	2,204
2	Casing Joint	9 5/8	8.844	40.00	HCK-55			73.27	2,204	2,277
1	Float Shoe	9 5/8	8.844	40.00	HCK-55			1.63	2,277	2,279

<b>Production Casing, Planned? N: 12,878ftKB</b>			
Casing Description <b>Production Casing</b>	Wellbore <b>Original Hole</b>	Run Date <b>8/6/2014</b>	Set Depth (MD) (ftKB) <b>12,878</b>
			Stick Up (ftKB) <b>-31.3</b>
			Set Tension (kips) <b></b>
Centralizers	Scratchers		

Qts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn SZ (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
0	Casing Joint	5 1/2	4.892	17.00	P-110		CDC	0.00	31	31
0	Landing Hanger	5 1/2	4.892	17.00	P-110		CDC	0.00	31	31
176	Casing Joint	5 1/2	4.892	17.00	P-110		CDC	7,101.33	31	7,133
1	Marker Joint	5 1/2	4.892	17.00	P-110		CDC	9.03	7,133	7,142
137	Casing Joint	5 1/2	4.892	17.00	P-110		CDC	5,544.42	7,142	12,686
1	Pup	5 1/2	4.892	17.00	P-110		CDC	8.45	12,686	12,695
1	RSI Sleeve	5 1/2	4.892	17.00	P-110		CDC	5.65	12,695	12,700
1	Casing Joint	5 1/2	4.892	17.00	P-110		CDC	40.87	12,700	12,741
1	Blank Liner	5 1/2	4.892	17.00	P-110		CDC	8.46	12,741	12,750
1	Landing Collar	5 1/2	4.892	17.00	P-110		CDC	1.57	12,750	12,751
1	Casing Joint	5 1/2	4.892	17.00	P-110		CDC	40.62	12,751	12,792
1	Float Collar	5 1/2	4.892	17.00	P-110		CDC	2.00	12,792	12,794
2	Casing Joint	5 1/2	4.892	17.00	P-110		CDC	82.50	12,794	12,876
1	Float Shoe	5 1/2	4.892	17.00	P-110		CDC	1.78	12,876	12,878



# Cement Summary

Production Casing Cement

Well Name SKEEN 2-26-27 ST 001H	Lease Skeen 2-26-27	Field Name Delaware River	Business Unit Mid-Continent
Ground Elevation (ft) 3,226.00	Original RKB (ft) 3,257.00	Current RKB Elevation 3,257.00, 3/13/2014	Mud Line Elevation (ft) Water Depth (ft)

## Production Casing Cement Casing: 8/8/2014 06:30

Cementing Start Date 8/8/2014	Cementing End Date 8/8/2014	Wellbore Original Hole
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Evaluation Method Cement Evaluation Results Circulated 100 bbls ( 221 sks ) lead cement to surface
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Comment  
Pump 1115 sacks of Varicem- PB1, 2.54 yeild, 10% fe-2, 10% fwca, 3 lbm kol seal, 20% hr-601.

Pump 920 sks Varicem PB2 at 12.5 lb, 1.87 yeild, 9.55 gal/sk with 50% halad r-344, 30% cfr-3, 3lbm kol seal, 05% fe-2.

Pump 100 sacks Solucem cmt at 15 lb, 2.606 yeild, 11.19 gal/sk with 70% halad r-344 10lbm silicalite 50/50, 25 lbm d-air 5000, 40 % hr 601.

## 1: <depthtop> <depthbtm> ftKB

Top Depth (ftKB)	Bottom Depth (ftKB)	Full Return?	Vol Cement Ret (bbl)	Top Plug?	Bottom Plug?
		N		N	N
Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Avg Pump Rate (bbl/min)	5.5	Final Pump Pressure (psi)	Plug Bump Pressure (psi)
				80.0	
Pipe Reciprocated?	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)		Pipe Rotated?	Pipe RPM (rpm)
N				N	
Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)		Drill Out Diameter (in)	Drill Out Date

## Lead

Fluid Type Lead	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl)
		1,115		
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)
				19.55
Free Water (%)	Density (lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

## Cement Fluid Additives

Add	Type	Conc
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## 2: <depthtop> 7,320.0ftKB

Top Depth (ftKB)	Bottom Depth (ftKB)	Full Return?	Vol Cement Ret (bbl)	Top Plug?	Bottom Plug?
	7,320.0	N	0.0	N	N
Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Avg Pump Rate (bbl/min)	7	Final Pump Pressure (psi)	Plug Bump Pressure (psi)
				317.0	
Pipe Reciprocated?	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)		Pipe Rotated?	Pipe RPM (rpm)
N				N	
Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)		Drill Out Diameter (in)	Drill Out Date

## <type>

Fluid Type	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl)
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)
Free Water (%)	Density (lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

## Cement Fluid Additives

Add	Type	Conc
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## 3: 7,320.0-11,920.0ftKB

Top Depth (ftKB)	Bottom Depth (ftKB)	Full Return?	Vol Cement Ret (bbl)	Top Plug?	Bottom Plug?
7,320.0	11,920.0	N		N	N
Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Avg Pump Rate (bbl/min)	7	Final Pump Pressure (psi)	Plug Bump Pressure (psi)
				377.0	
Pipe Reciprocated?	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)		Pipe Rotated?	Pipe RPM (rpm)
N				N	
Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)		Drill Out Diameter (in)	Drill Out Date

## <type>

Fluid Type	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl)
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)
Free Water (%)	Density (lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

## Cement Fluid Additives

Add	Type	Conc
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# Cement Summary

Production Casing Cement

Well Name SKEEN 2-26-27 ST 001H		Lease Skeen 2-26-27		Field Name Delaware River		Business Unit Mid-Continent	
Ground Elevation (ft) 3,226.00	Original RKB (ft) 3,257.00	Current RKB Elevation 3,257.00, 3/13/2014				Mud Line Elevation (ft)	Water Depth (ft)

4 11 920.0 12,884.0 ftKB							
Top Depth (ftKB) 11,920.0	Bottom Depth (ftKB) 12,884.0	Full Return? N	Vol Cement Ret (bb)	Top Plug? *	Bottom Plug?		
Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Avg Pump Rate (bbl/min) 4		Final Pump Pressure (psi) 145.0	Plug Bump Pressure (psi)		
Pipe Reciprocated? N	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)		Pipe Rotated? N	Pipe RPM (rpm)		
Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)		Drill Out Diameter (in)	Drill Out Date		

<type>				
Fluid Type	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl)
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)
Free Water (%)	Density (lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives		
Add	Type	Conc