SPN Well Services
E-LINE

RADIAL BOND TOOL
GAMMA RAY
CCL

Company	NOBLE ENERGY
Well	SINJIN 36-10
Field	WATTENBERG
County	WELD
State	COLORADO

Company NOBLE ENERGY
Well SINJIN 36-10
Field WATTENBERG
County WELD State COLORADO
Location: API #: 05-123-16304
NW/SE
LAT 40.44028837 LONG -104.60879452
SEC 36 TWP 6N RGE 65W
Other Services

Permanent Datum GL Elevation 4,650'
Log Measured From K.B. OF 9'
Drilling Measured From KELLY BUSHING
Elevation
K.B. 4,659'
D.F. 4,658'
G.L. 4,650'

Date	4-24-2019
Run Number	ONE
Depth Driller	7,042'
Depth Logger	5,954'
Bottom Logged Interval	5,950'
Top Log Interval	SURFACE
Open Hole Size	7 7/8"
Type Fluid	WATER
Density / Viscosity	1.0
Max. Recorded Temp.	NA
Estimated Cement Top	5,858'
Time Well Ready	NA
Time Logger on Bottom	NA
Equipment Number	3813
Location	GREELEY CO
Recorded By	J.KERR
Witnessed By	S.MAREZ

Borehole Record				Tubing Record		
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8 5/8"	23#	SURFACE	341'
Prot. String				
Production String	2 7/8"	6.5#	SURFACE	7,042'
Liner				

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

RAN CBL TO VERIFY CEMENT BOND
CORRELATED TO K.B. OF 9"
POSSIBLE CEMENT @ 60'

Sensor	Offset (ft)	Description	Len (ft)	OD (in)	Wt (lb)
		1_4	1.00	1.36	5.00
		1.69variable 1.69" Centrilizer Variable Length	3.00	1.69	15.00
TEMP WVFCAL WVFS1 WVFS2 WVFS3 WVFS4 WVFS5 WVFS6 WVF3FT WVF5FT WVFTEMP	15.09 13.64 13.64 13.64 13.64 13.64 13.64 13.64 12.89 11.89 8.59	SCBLTEKSLIM-T169Temp (16SBT20-010t9.67 1 11/16 Sector with Temp		1.69	53.00
		1.69variable 1.69" Centrilizer Variable Length	3.00	1.69	15.00
CCL	4.47	CCL-16CCL20 (16CCL20-XXXX) 1-11/16" Applied CCL	1.76	1.69	5.00
GR	1.00	GR-16GRL24 (16GRL24-XXXX) 1-11/16" Gamma Ray Scint	3.83	1.69	20.00

Dataset: sinjin 36-10.db: field/well/run1/pass7
Total Length: 22.26 ft
Total Weight: 113.00 lb
O.D. 1.69 in

Database File: sinjin 36-10.db
Dataset Pathname: pass7
Presentation Format: _scblt6
Dataset Creation: Wed Apr 24 15:16:50 2019 by Log SCH 120126
Charted by: Depth in Feet scaled 1:240

Calibration Report

Database File: sinjin 36-10.db
Dataset Pathname: pass7
Dataset Creation: Wed Apr 24 15:16:50 2019 by Log SCH 120126

Gamma Ray Calibration Report

Serial Number:	16GRL24-XXXX	
Tool Model:	16GRL24	
Performed:	Sun Jun 13 13:33:21 1993	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	16SBT20-0106	
Tool Model:	T169Temp	
Calibration Casing Diameter:	2.875	in
Calibration Depth:	4400.130	ft

Master Calibration, performed Wed Apr 24 15:10:57 2019:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	1.840	0.000	106.451	57.858	0.000
CAL	0.000	1.682				
5'	0.000	0.766	0.000	106.451	138.930	0.000
SUM						
S1	0.000	1.794	0.000	106.451	59.333	0.000
S2	0.000	1.572	0.000	106.451	67.733	0.000
S3	0.000	1.812	0.000	106.451	58.762	0.000
S4	0.000	2.196	0.000	106.451	48.467	0.000
S5	0.000	2.321	0.000	106.451	45.867	0.000
S6	0.000	2.167	0.000	106.451	49.128	0.000
S7						
S8						

Internal Reference Calibration, performed Wed Dec 31 17:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.000	1.682	1.000	0.000

Air Zero Calibration, performed Wed Apr 24 14:26:35 2019:

	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.000	0.000	0.000
5'	0.000	0.000	0.000
SUM			
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
S3	0.000	0.000	0.000
S4	0.000	0.000	0.000
S5	0.000	0.000	0.000
S6	0.000	0.000	0.000
S7			
S8			

Temperature Calibration Report

Serial Number:	16SBT20-0106			
Tool Model:	T169Temp			
Performed:	Sun Jun 13 13:33:21 1993			
	Reference		Reading	
Low Reference:	0.00	degF	0.00	usec
High Reference:	1.00	degF	1.00	usec
Gain:	1.00			
Offset:	0.00			
Delta Spacing	2			

SPN Well Services
E-LINE

Company	NOBLE ENERGY
Well	SINJIN 36-10
Field	WATTENBERG
County	WELD
State	COLORADO