

Well Name: GRANT ARENS 01

Well Config: VERTICAL - ORIGINAL HOLE, 3/12/2012 1:02:23 PM

Well Header

API 05-123-10401		Business Unit WATTENBERG		Spud Date 9/16/1981		Well Configuration Type VERTICAL	
Orig KB Elev (ft) 4,725.00		KB - GL / ... 10	Quarter Quarter NWNE	Sec/Abs 22	Twn/Sur... 4N	Range 65W	P & A Date
Comment							

Directions To Well

CR 44 - CR 45 WEST 3/10 SOUTH THROUGH FARM YARD TO TB WEST INTO

Current PBTD (ftKB)

ORIGINAL HOLE - 7125.3

Bottom Hole Location

North-South Distance (ft)	From N or S Line	East-West Distance (ft)	From E or W Line
---------------------------	------------------	-------------------------	------------------

PBTDs

Date	Depth (ftKB)	Method	Comment
10/8/1981	7,118.0	CASED HOLE LOG	DEPTH LOGGER ON CBL
4/4/2006	7,115.0	TAG	C/O & LAND TBG

Wellbore Sections

Section	Size (in)	Act Top (ftKB)	Act Btm (ftKB)
SURFACE	12 1/4	10.0	459.0
PRODUCTION	7 7/8	459.0	7,180.0

Zone Statuses

Zone	Status Date	Status	Job
CODELL	12/21/1981	PR	DRILLING/COMPLETION - ORIGI...
SUSSEX	12/14/1993	PR	RECOMPLETION, 9/27/1993 00:00
NIOBRARA	12/14/1993	PR	RECOMPLETION, 9/27/1993 00:00
SUSSEX	3/14/2006	AB	RE-FRAC, 3/9/2006 00:00
NIOBRARA	4/6/2006	PR	RE-FRAC, 3/9/2006 00:00
CODELL	11/21/2011	PR	RE-FRAC, 11/10/2011 07:00

Casing Strings

Casing Description	Run Date	String OD (in)	String Wt (lbs/ft)	String Grade	Top (ftKB)	Set Depth (ftKB)
Surface Casing	9/16/1981	8 5/8	24.00		10.0	459.0
Production	10/1/1981	4 1/2	10.50	J-55	10.0	7,159.0

Cement

Description	Top (ftKB)	Btm (ftKB)
SURFACE CASING CEMENT	10.0	459.0
PRODUCTION CASING CEMENT SQZ	3,690.0	4,688.0
CEMENT SQUEEZE SUSSEX PERFS	4,250.0	4,424.0
PRODUCTION CASING CEMENT	6,290.0	7,159.0

Tubing Components

Item Description	OD (in)	Wt (lbs/ft)	Grade	Jts	Len (ft)
EUE 8rd Tubing	2 3/8	4.70	J-55	229	7,064.92
Notch Seat Nipple	2 3/8	4.70	N-80	1	1.20

Perforation Data

Zone	Bnch/Stg	Entered Shot Total	Top (ftKB)	Btm (ftKB)	Date
SUSSEX, ORIGINA...		16	4,396.0	4,404.0	10/4/1993
SUSSEX, ORIGINA...		1	4,600.0	4,600.0	10/3/1993
NIOBRARA, ORIGI...		108	6,804.0	6,822.0	3/16/2006
NIOBRARA, ORIGI...	A	8	6,815.0	6,818.0	9/23/1993
NIOBRARA, ORIGI...		84	6,884.0	6,898.0	3/16/2006
NIOBRARA, ORIGI...	B	12	6,890.0	6,895.0	9/23/1993
NIOBRARA, ORIGI...	C	4	6,960.0	6,962.0	9/23/1993
CODELL, ORIGINA...		60	7,092.0	7,107.0	10/31/2011
CODELL, ORIGINA...		15	7,094.0	7,104.0	10/14/1981

Stimulations & Treatments

Bnch/...	Date	Zone	Primary Job Type
	10/14/1981	CODELL, ORIGINAL HOLE	DRILLING/COMPLETION - ORIGINAL

Comment

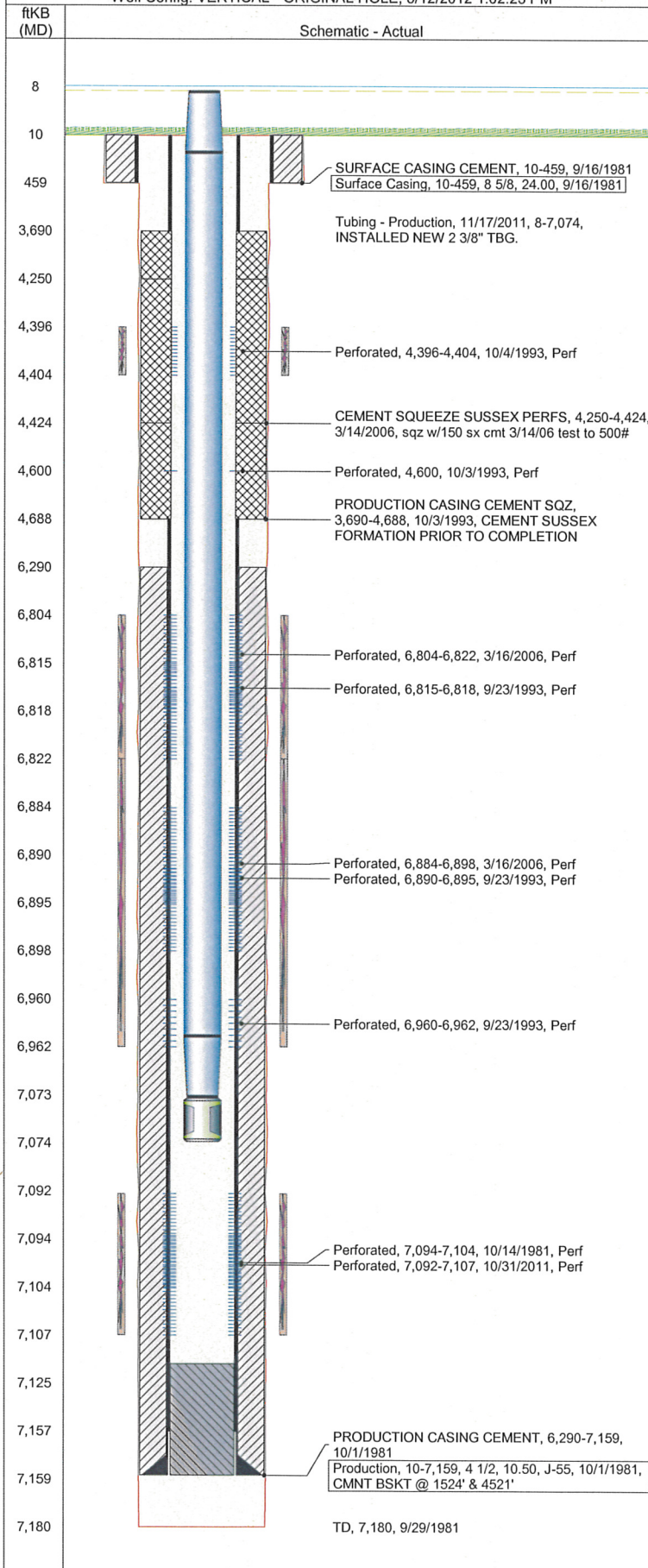
Total Add Amount	V (pumped) (gal)	V (slurry) (gal)	V (gas) (mcf)
Proppant 100 MESH 15000 lb; Proppant 135750 lb		86050	

Avg Treat Pressure (psi)	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
8,000.0	8,280.0	18.00	

TD, 7,180, 9/29/1981

Well Name: GRANT ARENS 01

Well Config: VERTICAL - ORIGINAL HOLE, 3/12/2012 1:02:23 PM



Stimulations & Treatments

Bnch/...	Date	Zone	Primary Job Type	
	10/5/1993	NIOBRARA, ORIGINAL HOLE	RECOMPLETION	
Comment				
Total Add Amount		V (pumped) (gal)	V (slurry) (gal)	V (gas) (mcf)
Proppant 165900 lb			37838	
Avg Treat Pressure (psi)		Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
5,700.0		5,950.0	11.50	12.00
Bnch/...	Date	Zone	Primary Job Type	
	11/11/1993	SUSSEX, ORIGINAL HOLE	RECOMPLETION	
Comment				
Total Add Amount		V (pumped) (gal)	V (slurry) (gal)	V (gas) (mcf)
Proppant 302800 lb			83580	
Avg Treat Pressure (psi)		Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
2,700.0		3,700.0	24.70	25.80
Bnch/...	Date	Zone	Primary Job Type	
	3/29/2006	NIOBRARA, ORIGINAL HOLE	RE-FRAC	
Comment				
Total Add Amount		V (pumped) (gal)	V (slurry) (gal)	V (gas) (mcf)
Proppant SB Excel 12000 lb; Proppant 238140 lb		7050708		
Avg Treat Pressure (psi)		Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
6,990.0		7,505.0	0.60	0.65
Bnch/...	Date	Zone	Primary Job Type	
	11/10/2011	CODELL, ORIGINAL HOLE	RE-FRAC	
Comment				
(CODELL REFRAC)PUMPED JOB PER DESIGN AT A HIGHER RATE 20BPM DUE TO HIGH LEAKOFF.				
ISIP 2671, 5 MIN 1058. AVERAGES: VISC 22.45, TEMP 72.3, PH 10.22. POST 5MIN 2845.				
Total Add Amount		V (pumped) (gal)	V (slurry) (gal)	V (gas) (mcf)
Ottawa 0		127353	138663	
Avg Treat Pressure (psi)		Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
5,700.0		6,100.0	19.90	20.70

Other In Hole

Run Date	Description	OD (in)	Top (ftKB)	Btm (ftKB)

Logs

Date	Type	Top (ftKB)	Btm (ftKB)
10/1/1981	COMPENSATED DENSITY	4,250.0	7,178.0
10/1/1981	INDUCTION	430.0	7,173.0
10/8/1981	CEMENT BOND	6,200.0	7,110.0
10/8/1981	GAMMA RAY NEUTRON	4,250.0	7,120.0
11/4/1993	CEMENT BOND	3,620.0	4,250.0