

OKF-105/OKF-42 Field Forms



Project No. _____ Date 5/19/09

DAILY OPERATIONS REPORT

Temp = 80°F

Contractor Florida Design Drilling

Well No. OKP 105

Weather <u>Overcast, Slight breeze</u>	Time	Description of Operations
Shift No. _____ Time _____	11:30	Brian Collins and Simon Sunderland arrive on site.
Driller _____		
Activity <u>Drilling</u>		
Starting Depth <u>1,383 feet BLS</u>	12:00	Calibrate VSI for Sample Collection.
Shift No. _____ Time _____		Standard read adjust
Driller _____		pH 7 7.17 7.00
Activity _____		pH 4 3.99 4.00
Starting Depth _____		pH 10 9.99 10.00
Formation samples collected <u>yes</u>		SC 2000 2,016 2,000
Water samples collected <u>1,417 feet</u>	15:28	SLOW drilling, hard dolomite. Reach 1,417 feet BLS, end of first rod. collect water, levels and water quality samples (Cl, SO ₄ , TDS).
Deviation Survey _____	16:08	collect and filter water samples for Cl, SO ₄ , TDS
Drilling fluid additives <u>Reverse - ar</u>	18:45	off site @ 1425 feet BLS.
Well water level		
Time	Depth	
15:28	in rd - 6.25 / outside - 6.25 in.	
Measurement reference point _____		
elevation _____		
Supply deliveries _____		

Project No. DLF-105 Date 5/20/07

DAILY OPERATIONS REPORT

Contractor

Well No.

Weather	Description of Operations
Partly cloudy, moderate breeze	
Shift No. _____ Time _____	09:45 Brian Collins and Simon Sankelidze on site
Driller _____	
Activity <u>Drilling</u>	
Starting Depth <u>1425 feet b/s.</u>	13:44 Reached 1,449 feet b/s, end of rod. collect water quality sample and water levels.
Shift No. _____ Time _____	
Driller _____	
Activity _____	
Starting Depth _____	14:08 water quality sample collected @ 1,449 feet b/s. pH 7.28 Temp 28.83°C SL 1,885 psi/cm still in hard dolomite
Formation samples collected <u>1449 ft</u>	
Yes _____	
Water samples collected <u>1449 feet</u>	
Deviation Survey _____	17:17 Drillers at 1468 feet b/s. They will drill to 1,470 feet b/s and run a deviation survey.
Drilling fluid additives _____	17:30 off site.
Reverse, air _____	
Well water level	
Time _____ Depth _____	
13:44 6:41 feet	
Measurement reference point _____	
elevation _____	
Supply deliveries _____	

Date 5/21/09

Time 750 hr

Well No.

OKF-105

Time	Description of Operations
10:10	Brian Collins and Simon Sunderland arrive on site at S-65C. Drilling at 1482 feet b/s, ready to run a deviation survey. 10:15-10:40 lock opened may affect downstream turbidity
11:37	Collect water level measurements. at 1492 6.4' in Bed, or less an outside.
12:06	Collect water quality samples for chlorides and Sulphates 12:15-12:50 Boat through lock - turbidity influence on downstream sensor
15:51	Reached a depth of 1511 feet b/s
16:18	water level measurements taken
16:25	water quality samples collected.
17:15	Heavy rain and lightning off site

Project No. _____ Date 5/22/09

DAILY OPERATIONS REPORT

Contractor _____

Well No. OKF-105

Weather <u>Overcast, mod. breeze, temp 28.0°</u>		Time	Description of Operations
Shift No. _____	Time _____	09:40	Simon Sunderland arrives on site at S-65C.
Driller _____			
Activity _____			
Starting Depth <u>1,525</u>			10:35 - 10:50 locks open - turbidity.
Shift No. _____	Time _____		
Driller _____		11:04	reached 1,544 feet bbs
Activity _____			1,535 to 1,540 hard drilling.
Starting Depth _____			
Formation samples collected <u>yes</u>		11:25	collect water level measurements
<u>1,517 - 1,575</u>			
Water samples collected <u>1,544 and 1,575</u>		11:35	collect water quality samples field and lab (Cl, SO ₄ , TDS).
Deviation Survey _____		15:45	collect water quality sample at 1,575 feet for field and lab (Cl, SO ₄ , TDS) analysis.
Drilling fluid additives _____		16:00	collect water levels
<u>Reverse air</u>		16:35	off site
			17:00 - 18:00 heavy rain
Well water level			
Time	Depth		
11:35	6.51		artesian
15:45	4.3		artesian
Measurement reference point _____			
elevation _____			
Supply deliveries _____			

Well No. OKF-105

DAILY OPERATIONS REPORT

TEMP 85° F

Weather		Partly clouds, slight breeze	
Shift No.		Time	
Driller			
Activity			
Starting Depth			
		1575'	
Shift No.		Time	
Driller			
Activity			
Starting Depth			
Formation samples collected _____			
Water samples collected _____			
Deviation Survey _____			
Drilling fluid additives _____			
Well water level			
Time		Depth	
15:18		7.05'	unknown
Measurement reference point ^{2'} _____			
elevation _____			
Supply deliveries _____			

Time	Description of Operations
10:00	Steve Anderson and Simon Sundeland arrive at S-652.
10:55	Start drilling depth = 1575' natural artesian flow in the well is higher than when project started.
12:50	locks open (3 bolts & it).
13:24	bolts gone.
14:04	Collect water quality sample from 1607'
14:10	locks open
14:30	locks closed.
15:19	Take water level measurements.
17:00	off site. Heavy rain.

Well No. _____

temp 85°F

Project No. 0121-103 Date 6/1/00

Contractor _____

Well No. _____

[illegible]

Project No. GRF-705 Date 6/2/09

DAILY OPERATIONS REPORT

Contractor FL Design Drilling

Well No. Third Phase

[illegible]

Project No. OKF-100 Date 6/3/01

DAILY OPERATIONS REPORT

Contractor _____

Well No. _____

[illegible]

Project No. _____ Date 6/4/0

Contractor _____

Well No. 012F-105

[illegible]

Well No. OPF-105

DAILY OPERATIONS REPORT

Weather	Description of Operations
Partly Cloudy 80's F	
Shift No. _____ Time _____	10:35 Brian Collins arrives on site.
Driller _____	Drillers collected core from 2100 to 2115. Drillers tripping into hole.
Activity _____	
Starting Depth _____	
 Shift No. _____ Time _____	12:30 calibrate VSI
Driller _____	13:05 Begin drilling, collect water quality sample @ 2100
Activity _____	
Starting Depth _____	15:05 collect water quality sample @ 2132'
Formation samples collected _____	
 Water samples collected 2100, 2132, 2150	15:35 collect water level measurement @ 2132'
Deviation Survey _____	17:03 collected water quality sample from 2150.
Drilling fluid additives _____	17:20 off mt
Well water level	
Time 20' Depth	
15:35 5-90 -	
Measurement reference point _____	
elevation _____	
Supply deliveries _____	

Project No. 915-105 Date 6/10/09

DAILY OPERATIONS REPORT

Contractor _____

Well No. OPF-105

Weather <u>Partly Cloudy, Slight Breeze, 65°</u>	Time	Description of Operations
Shift No. _____ Time _____		
Driller _____	09:55	Simon Sunderland arrives at S-65C.
Activity _____		
Starting Depth _____		
Shift No. _____ Time _____	10:09	Calibrate YSI and collect water quality sample at 2330'.
Driller _____		
Activity _____		water level collect by driller @ 2320.
Starting Depth _____		inside rod: 8.2'
Formation samples collected _____		rod & dat 2 2.2'
		outside 2' at 2330
Water samples collected <u>2330</u> <u>2354, 2387, 2417, 2448</u>	11:24	Collect water quality data from 2354'.
Deviation Survey _____	11:45	Collect water level data from 2354
Drilling fluid additives _____	13:24	Collect water quality data from 2387
	14:05	Collect water level data @ 2387'.
	15:48	Collect water quality data @ 2417.
Well water level	16:28	Collect water level measurements @ 2417.
Time	Depth	
07:30	8.2	-
11:45	13.3	-
14:05	15.0	-
19:26	15.1	-
Measurement reference point _____	18:31	Collect water quality sample @ 2448'.
elevation _____	19:26	Collect water level measurement @ 2448'.
Supply deliveries _____	19:49	off site

Measurement reference point _____

 elevation _____

 Supply deliveries _____

Client _____

Well No. OKF-105

Project No.: OKF-105

WATER QUALITY DATA FROM PILOT HOLE DRILLING

Date	Time	Depth (ft)	Temperature (°C)	Specific Conductance (µmhos/cm)	Chloride (mg/l)	Stem from pipe for	Remarks from top of well head	Observer's Initials	pH
5/19	15:28	1,417	27.18	1,775		6.25'	artesian		6.91
5/20	13:44	1,449	28.83	1,895		6.41	artesian		7.28
5/21	11:37	1,482	28.14	3,685		6.40	artesian		7.33
5/21	15:51	1,511	28.43	3,717		6.20	0.93		7.70
5/22	11:25	1,544	28.67	3,604		6.51	artesian		7.23
5/22	15:45	1,575	27.83	3,679		4.3	artesian		8.01
5/26	14:04	1,607	29.11	3,494		7.05	artesian		6.83
5/27	10:43	1,643	28.39	4,205		-	-		6.72
5/27	12:00	1,667	28.42	4,340		7.30	artesian		7.84
5/27	15:16	1,700	30.10	4,858		5.65	artesian		7.49
6/1	11:17	1,725	28.77	5,946		8.15	artesian		7.30
6/1	14:37	1,757	28.82	7,141		7.55	artesian		7.50
6/1	18:10	1,785	28.60	6,717		-	-		7.47
6/2	10:38 10:25	1,804 1,820	28.93 29.77	8,031 8,912		-	-	BCC	7.59
6/2	12:50	1,820	29.74	6,989		5.99	artesian	BCC	7.59
6/2	15:40	1,850	27.73	6,340		7.34	artesian	BCC	7.76
6/3	10:30	1,947	28.59	7,647		8.00	artesian		7.14
6/3	13:43	1,978	28.92	7,488		8.14	artesian		7.62
6/3	17:10	2,010	28.55	7,412		8.80	artesian		7.62
6/4	09:15	2,040	28.27	6,314		9.15	artesian		8.01

Client _____

Well No., OKF-105

Project No.: OKR-105

WATER QUALITY DATA FROM PILOT HOLE DRILLING

[illegible]

Depth (feet, bls)								
From	To	Rock Type	Colour	Texture	Porosity	Cement	Fossils & Accessories	Sedimentary Structures
1400	1430	Dolostone	brown	mudstone sucrosic	intergranular intercrystalline pinpoint	Dolomite cement well indurated	/	/
1430	1450	Dolostone	brown to black	crystalline	intergranular pinpoint	Dolomite cement well ind.	/	/
1450	1460	Dolostone	brown	Sucrosic and crystalline	intergranular pinpoint	Dolomite cement well ind.	/	/
1460	1470	Dolostone as above 30% limestone	tan	mudstone	intergranular pinpoint	caliche	none	none
1470	1480	limestone	tan white	mudstone	intergranular pinpoint	caliche friable	dictyonous	some laminar, dark/light
1480	1500	limestone	tan/ white	packstone	intergranular pinpoint	caliche well ind.	none	none
1500	1520	limestone	tan white	packstone	intergranular pinpoint	caliche well ind.	3% dolomite	none
1520	1550	limestone dolomite?	white	mudstone some crystalline	intergranular pinpoint	dolomite friable	none	none
1550	1560	limestone	tan	mudstone	"	caliche well ind.	Some crystalline None	none
1560	1570	limestone	tan	packstone	"	"	"	none
1570	1610	limestone	white	mudstone	" "	" "	25% or less massive dark brown crystalline dolomite	none

Depth (feet, bls)								
From	To	Rock Type	Colour	Texture	Porosity	Cement	Fossils & Accessories	Sedimentary Structures
1610	1620	dolomite	grey/ tan	mod stone to crystalline	pin point	dolomite well ind.	none	none
1620	1630	limestone	tan to light brown	mod stone	pin point intergran inter lock	calcrete well ind.	mollich clasts.	none.
1630	1670	dolomite	tan/ dark brown	crystalline	pin point vuggy	dolomite well ind.	none	none
1670	1680	dolomite	tan/ dark brown	crystalline	"	"	10% white 1-3" mouldings	"
1680	1690	dolomite	tan/ dark brown	crystalline	"	"	none	none
1690	1710	dolomite	tan/ dark brown	"	"	"	10% white 1-3" mouldings	"
1710	1730	dolomite	tan/ brown	"	"	"	none	"
1730	1740	dolomite	tan	"	"	"	50% white limestone (Puer shu frankle)	"
1740	1750	limestone	white	limestone	pin point vuggy inter gran	calcrete frankle	none	none
1750	1760	dolomite	brown	crystalline	pin point vgy	dolomite well ind.	Some fossil cherty	none
1760	1770	limestone	white	limestone	pin point vgy inter gran	calcrete frankle	dictyonas forams.	none.

Depth (feet, bls)									
From	To	Rock Type	Colour	Texture	Porosity	Cement	Fossils & Accessories	Sedimentary Structures	
1770	1800	dolomite	brown	crystalline well indurated	Pin point	dolomite	evaporites	none	
1800	1820	dolomite	tan / brown	crystalline well indurated	Pin point	dolomite	40% white limestone pale green crumbly	5-10% evaporites none	
1820	1840	limestone	white	packstone friable	inter granular	calcite	10% brown crystalline dolomite	none	olds mar
1840	1865	dolomite	tan to brown	crystalline well indurated	Pin point vuggy	dolomite	5% evaporites	none	
1865	1870	dolomite	tan to brown	crystalline well indurated	Pin point	dolomite	25% white limestone pale green crumbly	none	
1870	1890	limestone	white	packstone friable	Blocky inter granular	calcite	5% dolomite (brown) crumbly	none	
1890	1895	dolomite	tan to white	packstone granular	inter granular	dolomite calcite	5% limestone white fossils	none	
1895	1910	dolomite	tan to brown	granular to well ind. crystalline	inter granular Pin point	dolomite	5% white 1-2% granular	none	
1910	1920	dolomite	tan to brown	crystalline well ind.	Pin point vuggy	dolomite	1-2% evaporites	none	
1920	1960	dolomite	tan	crystalline well ind.	inter Pin point	dolomite	1% none	none	
1960 1965	2015	dolomite	tan	"	"	"	10% evap.	none	

Depth (feet, bls)								
From	To	Rock Type	Colour	Texture	Porosity	Cement	Fossils & Accessories	Sedimentary Structures
2015	2025	Dolomite	tan	crystalline fine gr.	pin point	dolomite	10% evap fl. - calc	none.
2025	2040	Dolomite	tan	crystalline well ind.	pin point to v. big	dolomite	1% calcite and evaporites	none.
2040	2060	Dolomite	tan	crystalline well ind.	pin point to v. big	dolomite	15-20% calcite or evaporites	none.
2060	2070	limestone	white to tan	packstone fine gr.	intergranular v. big	calcite	1-5% tan dolomite crystalline	none.
2070	2110	limestone	white	packstone fine gr.	intergranular medium pin point some v. big	calcite	mollusk fragments	none.
2110	2120	"	"	"	"	"	"	lugs = calcite
2120	2132	limestone	white	packstone fine gr.	"	calcite	40% brown spherical dolomite	none ix. chert
2132	2140	dolomite	tan	crystalline	inter- crystalline	dolomite	1% anhydrite	none
2140	2150	dolomite and limestone	white to tan	crystalline medium gr.	"	dolomite	chert 30% evap.	none
2150	2165	dolomite	tan	crystalline cell medium	pin point to v. big	dolomite	15% white medium to p. 2165	none
2165	2175	dolomite	tan	medium	intergranular	dolomite	calcite crust	none

or
10-15%
white
limestone
medium

Depth (feet, bls)								
From	To	Rock Type	Colour	Texture	Porosity	Cement	Fossils & Accessories	Sedimentary Structures
2175	2190	dolomite	tan	crystalline well ind.	vuggy	dolomite	30% white limestone matrix 1% anhydrite	forams
2190	2200	dolomite	tan to white	crystalline moderate friable	inter granular	dolomite	15% anhydrite as a cement	none
2200	2220	limestone	white	crystalline moderate friable	intergranular to vuggy	caliche	15% black shale grains in matrix	forams
2220	2230	limestone	white to tan	crystalline friable	intergranular	caliche	1% anhydrite	none
2230	2240	limestone	tan	crystalline friable	intergranular to moderate	caliche	10% Tan crystalline dolomite	moderate frag. none
2240	2250	"	white	"	"	"	1% anhydrite	"
2250	2260	dolomite	tan to brown	crystalline to moderate well ind.	intergranular to vuggy	dolomite	none	none
2260	2280	dolomite	white to tan	crystalline well ind.	inter crystalline	dolomite	10% caliche white moderate anhydrite	none
2280	2290	dolomite	grey	crystalline well ind.	inter crystalline	dolomite	40% grey l.s. granular	
2290	2295	limestone	white	moderate friable	intergranular	caliche	20% tan to brown vuggy dolomite crust	21% chert none
2295	2305	"	"	moderate to moderate friable	"	"	none	none

Depth (feet, bls)								
From	To	Rock Type	Colour	Texture	Porosity	Cement	Fossils & Accessories	Sedimentary Structures
2300	2310	limestone	white	nodular to packstone friable	intergran. pin point	calcrete	10% spongy Tan crystalline dolomite	
2310	2320	Dolomite	Tan	crystalline wackestone packstone	intergran.	dolomite calcrete	10-20% white 1-5' chert	none
2320	2325	dolomite	grey	Successive w-ind	intergranular	dolomite	10-20% grey (light) limestone nodular	
2325	2340	dolomite	tan to brown	crystalline to packstone w-ind	inter crystalline to intergran.	dolomite & calcrete	<1% anhydrite and white limestone	
2340	2360	dolomite	tan	wackestone w-ind	intergranular	"	none	none
2360	2370	"	tan to grey	"	"	"	<1% chert	none
2370	2380	"	tan	"	"	"	none	none
2380	2390	"	tan to grey	crystalline w-ind	inter crystalline	dolomite	<1% chert	none
2390	2395	"	tan	crystalline w-ind	"	"	30% white to grey limestone packstone	none
2395	2410	limestone	white	packstone friable	intergranular to vuggy	calcrete	moderately none	none
2410	2420	dolomite	light grey to tan	nodular	"	dolomite	none	none

Depth (feet, bls)								
From	To	Rock Type	Colour	Texture	Porosity	Cement	Fossils & Accessories	Sedimentary Structures
2420	2425	dolomite	grey	crystalline w. ind.	inter crst.	dolomite	none	none
2425	2455	limestone	white	mudstone friable	inter gran. to pinpoint	caliche	10% dolomite as above	none
2455	2460	"	"	" same weather	"	"	10% dolomite as above except tan	channel none
2460	2470	"	"	limestone friable	"	"	"	"
2470	2475	"	"	"	"	"	30% as above	"
2475	2480	dolomite	tan	crystalline w. ind.	inter crst. to pinpoint	dolomite	40% 15 as above	none
2480	2490	dolomite	tan	crystalline w. ind.	inter crst. to nuggy	dolomite	none	none
2490	2500	dolomite	tan to dark grey	crystalline to packstone w. ind.	"	dolomite (crystalline) caliche (pink)	none	none