



SAVIA
PERÚ

REPORT N° 1

LOBITOS FIELD

LO6-30D GEOLOGICAL DAILY REPORT

Geologists:	D. Paz	OPERATIONS DATE :	3-Mar-14
Mud Loggers:	G. Cardoza/H. Monasterio	REPORT DATE :	4-Mar-14
Rig Contractor:	RIG 40	SPUD DATE:	2-Mar-14
Depth @ 00h00 (ft):	450	PROGRESS 00h00-24h00 (ft):	0
Depth @ 24h00 (ft):	450	Conductor:	18" 0
Depth @ 06h00 (ft):	450	DRILLING DAYS:	2

Operations summary:

Continued Run conductor. RIH under reamer but not opening arms to 22". M/U & RIH magnet. Working on bottom. M/U new under reamer & tested on surface, ok. RIH 22" under reamer 405'ft and enlarge hole from 17" to 20" diameter. Run 18" conductor to 450'ft. POOH under reamer to surface.

Present operations:

N/U diverter.

Forecast operations:

Perform cement job. M/U 17" tooth bit and DOC.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Sist %	Sst %	Sd %	Lmst %	Dol %			Fluor %	LITHOLOGICAL DESCRIPTION

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)

Mud information:

Type:
Mud Weight (ppg):
Viscosity (sec):
Filtrate (ml):

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
TALARA SST			FROM SURFACE		

Remarks

Wellsite Geologist arrived to LO6 platform on March 03rd, 2014.
Mudlogging cabin 40% ready (sensors & system).

Well Cost:

AFE	4 816 710	US\$
DAILY	84 268	US\$
CUMULATED	543 926	US\$



SAVIA
PERÚ

REPORT N° 2

LOBITOS FIELD

LO6-30D GEOLOGICAL DAILY REPORT

Geologists: D. Paz
Mud Loggers: G. Cardoza/H. Monasterio
Rig Contractor: RIG 40
Depth @ 00h00 (ft): 450
Depth @ 24h00 (ft): 450
Depth @ 06h00 (ft): 465

OPERATIONS DATE : 4-Mar-14
REPORT DATE : 5-Mar-14
SPUD DATE: 2-Mar-14
PROGRESS 00h00-24h00 (ft): 0
Conductor: 18" 450'
DRILLING DAYS: 3

Operations summary:

N/U 18" diverter spool. Medomack veseel arrived to location. Halliburton rig up cement lines. Pepesa RIH 5" cement lines, circulated and pumped vis pill. Closed 21" diverter and 8" lateral line. Tested cement line, ok. Performed cement job. Ok. Well closed and WOC. Halliburton disconnected and L/D cement lines.

Present operations:

M/U & RIH magnet.

Forecast operations:

POOH magnet. M/U directional BHA. Drill from 465' to 800' ft.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Sist %	Sst %	Sd %	Lmst %	Dol %			Fluor %	LITHOLOGICAL DESCRIPTION

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)

Mud information:

Type:
Mud Weight (ppg):
Viscosity (sec):
Filtrate (ml):

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
TALARA SST			FROM SURFACE		

Remarks

Mudlogging cabin 80% ready (sensors & system).

Well Cost:

AFE	4 816 710	US\$
DAILY	74 774	US\$
CUMULATED	618 700	US\$



SAVIA
PERÚ

REPORT N° 3

LOBITOS FIELD

LO6-30D GEOLOGICAL DAILY REPORT

Geologists: D. Paz
Mud Loggers: O. Ojeda/H. Monasterio
Rig Contractor: RIG 40
Depth @ 00h00 (ft): 450
Depth @ 24h00 (ft): 534
Depth @ 06h00 (ft): 635

OPERATIONS DATE : 5-Mar-14
REPORT DATE : 6-Mar-14
SPUD DATE: 2-Mar-14
PROGRESS 00h00-24h00 (ft): 84
Conductor: 18" 450'
DRILLING DAYS: 4

Operations summary:

Continued WOC. M/U & RIH slick BHA with 17" tooth bit. Tag cement to 445'MD. DOC from 445' to 450'MD. Drilled formation from 450' to 465'MD. POOH slick BHA. M/U and RIH 11" magnet to 465'MD. Worked magnet and POOH. Recovered 1kg of junk. Performed 2nd run of magnet. not recovered junk. M/U & RIH slick BHA with 17" tooth bit. M/U directional BHA WITH 17" tooth bit to 465'MD. Changed fluid water for mud. Drilled sliding and rotating from 465' to 534'MD. Took gyro surveys several times.

Present operations:

Gyro personnel is Taking Gyro survey at 648'MD.

Forecast operations:

Drill ahead to 800'MD.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Slst %	Sst %	Sd %	Lmst %	Dol %		Fluor %	LITHOLOGICAL DESCRIPTION
HELICO	460 - 640	28	30		30	40				NF	SST: md dk gy, loc md gy, vf-f qtz grns, hyal, sbang/sbrnd, w srt, arg mtx i/p, calc cmnt, md fri/md consl, w7dk lithcs grns incl, p vis por. NVOS. SD: wh, hyal, 60%f, 40%vf, Tr md grns, hyal, transl, sbang/sbrnd, w srt. CLYST: olv gy, loc olv blk, earthy, blk/sbbkly, occ irr, md frm/frm, mic mic, mic carb, sl calc. TG: 1 C1: 96 C2: 0 C3: 0 C4: 0 C5: 0

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)
417.00	4.19	257.60	416.65	-366.65	14.24	-2.30	-14.05
450.00	4.34	256.94	449.56	-399.56	16.69	-2.84	-16.45
509.00	6.19	254.67	508.31	-458.31	22.09	-4.19	-21.69

Mud information:

Type: Clay Seal
Mud Weight (ppg): 8.7
Viscosity (sec): 38
Filtrate (ml): 8.0

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
HELICO			FROM SURFACE		

Remarks

So far we have drilled 313'MD (310'Vss) of mainly sand and sandstone sequences interbedded w/claystone within Talara Sandstone fm. Gas average 1 unit (C1: 96ppm).

Last sample was 30%clyst; 20%sst & 50% sd.

Well Cost:

AFE	4 816 710	US\$
DAILY	83 683	US\$
CUMULATED	702 383	US\$



SAVIA
PERÚ

REPORT N° 4

LOBITOS FIELD

LO6-30D GEOLOGICAL DAILY REPORT

Geologists:	D. Paz	OPERATIONS DATE :	6-Mar-14
Mud Loggers:	O. Ojeda/H. Monasterio	REPORT DATE :	7-Mar-14
Rig Contractor:	RIG 40	SPUD DATE:	2-Mar-14
Depth @ 00h00 (ft):	534	PROGRESS 00h00-24h00 (ft):	298
Depth @ 24h00 (ft):	832	CONDUCTOR (ft):	18" 450
Depth @ 06h00 (ft):	925	DRILLING DAYS:	5

Operations summary:

Drilled rotating and sliding from 534' to 832'MD. Circulated. POOH at surface with 17" triconic bit.

Present operations:

Drilled rotating at 976'MD within Lobitos fm. (-914.48TVDss).

Prognosed operations:

Drill ahead to casing point (2100'MD).

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Slst %	Sst %	Sd %	Lmst %				Fluor %	LITHOLOGICAL DESCRIPTION
HELICO	640 - 757	26	20		30	50					NF	SST: md dk gy, loc md gy, vf-f qtz grns, hyal, sbang/sbrnd, w srt, arg mtx i/p, calc cmnt, md fri/md consl, w7dk lithcs grns incl, p vis por. NVOS. SD: wh, hyal, 60%f, 40%vf, Tr md grns, hyal, transl, sbang/sbrnd, w srt. CLYST: olv gy, loc olv blk, earthy, biky/sbbiky, occ irr, md frm/frm, mic mic, mic carb, sl calc. TG: 2 C1: 180 C2: 9 C3: 1 C4: 0 C5:0
LOBITOS	757 - 940	69	100								NF	CLYST: olv blk, loc olv gy, earthy surf, biky/sbbiky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. TG: 10 C1: 911 C2: 14 C3: 5 C4: 0 C5:0

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)
600.00	8.92	251.94	598.51	-548.51	34.01	-7.67	-33.13
692.00	12.01	253.64	688.97	-638.97	50.69	-12.58	-49.10
783.00	15.33	250.83	777.38	-727.38	72.15	-19.20	-69.55

Mud information:

Type:	Clay Seal
Mud Weight (ppg):	9.4
Viscosity (sec):	46
Filtrate (ml):	8.8

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
Helico			FROM SURFACE		
Lobitos	757.0	752.00	-702.00	-17.04	-63.25

Remarks

So far we have drilled 219'MD (211'ft Vss) of mainly claystone with calcite as accessory material within Lobitos fm. Gas average 10 units (C1-C3).

From 610' to 757'MD we have mainly sand and sandstone with claystone interbedded and gas average 2 units (C1-C3).

ROP average rotating mode is 100, and sliding mode is 25.

Well Cost:

AFE	4 816 710	US\$
DAILY	66 293	US\$
CUMULATED	768 676	US\$



SAVIA
PERÚ

REPORT N° 5

LOBITOS FIELD

LO6-30D GEOLOGICAL DAILY REPORT

Geologists:	D. Paz	OPERATIONS DATE :	7-Mar-14
Mud Loggers:	O. Ojeda/H. Monasterio	REPORT DATE :	8-Mar-14
Rig Contractor:	RIG 40	SPUD DATE:	2-Mar-14
Depth @ 00h00 (ft):	832	PROGRESS 00h00-24h00 (ft):	982
Depth @ 24h00 (ft):	1814	CONDUCTOR (ft):	18" 450
Depth @ 06h00 (ft):	2053	DRILLING DAYS:	6

Operations summary:

M/U directional BHA w/ 17" PDC bit and RIH to 832'MD. Drilled rotating and sliding from 832' to 1814'MD.

Present operations:

Drilling rotating at 2100'MD (-1717.5'TVDss).

Prognosed operations:

Drill at 2115'MD. POOH directional BHA. M/U slick BHA and RIH at bottom to condition hole. Run 13 3/8" csg.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Sist %	Sst %	Sd %	Lmst %				Fluor %	LITHOLOGICAL DESCRIPTION
LOBITOS	940 - 1240	93	100		10	TR					NF	CLYST: olv blk, loc olv gy, earthy surf, blk/sbbly, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. SST: md dk gy, loc md gy, vf-f qtz grns, hyal, sbang/sbrnd, w srt, arg mtx i/p, calc cmnt, md fri/md consl, w7dk lithcs grns incl, p vis por. NVOS. SD: wh, hyal, 60%f, 40%vf, Tr md grns, hyal, transl, sbang/sbrnd, w srt. TG: 9 C1: 915 C2: 3 C3: 0 C4: 0 C5:0
LOBITOS	1240 - 1780	110	100								NF	CLYST: olv blk, loc olv gy, earthy surf, blk/sbbly, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. TG: 13 C1: 1109 C2: 74 C3: 15 C4: 0 C5:0
LOBITOS	1780 - 2020	69	100								NF	CLYST: olv blk, loc olv gy, earthy surf, blk/sbbly, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. LMST-DOL: dk yel'sh brn, beige, occ brn's gy, mass aspec, hd-md hd, irr frac, mic carb. TG: 25 C1: 2114 C2: 123 C3: 39 C4: 0 C5:0

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)
1784.75	53.07	231.14	1588.30	-1538.30	617.52	-322.89	-526.38
1875.75	55.87	232.08	1641.18	-1591.18	691.10	-368.87	-584.43
1971.23	59.98	231.43	1691.87	-1641.87	771.59	-418.95	-647.95

Mud information:

Type:	Clay Seal
Mud Weight (ppg):	10.0
Viscosity (sec):	49
Filtrate (ml):	8.6

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
Helico					
FROM SURFACE					
Lobitos	757.0	752.00	-702.00	-17.04	-63.25

Remarks

So far we have drilled 1343'MD (1001'ft Vss) of mainly claystone with calcite as accessory material within Lobitos fm. Gas average 20 units (C1-C3).

From 1780' to 2020'MD we have mainly claystone with some limestone-dolomite interbedded and gas average 25 units (C1-C3).

Last survey at 1971.23'MD was incl 59.98°, az 231.43°, TVDss -1641.87°, distance respect to plan is 12.11'ft.

ROP average rotating mode is 120, and sliding mode is 60.

Well Cost:

AFE	4 816 710	US\$
DAILY	94 560	US\$
CUMULATED	863 236	US\$



SAVIA
PERÚ

REPORT N° 6

LOBITOS FIELD

LO6-30D GEOLOGICAL DAILY REPORT

Geologists:	D. Paz	OPERATIONS DATE :	8-Mar-14
Mud Loggers:	O. Ojeda/H. Monasterio	REPORT DATE :	9-Mar-14
Rig Contractor:	RIG 40	SPUD DATE:	2-Mar-14
Depth @ 00h00 (ft):	1814	PROGRESS 00h00-24h00 (ft):	301
Depth @ 24h00 (ft):	2115	CONDUCTOR (ft):	18"
Depth @ 06h00 (ft):	2115	DRILLING DAYS:	7

Operations summary:

Drilled rotating and sliding from 1814' to 2115'MD. 13 3/8" Csg point (2115'MD). Circulated on bottom. POOH 17" directional BHA. M/U slick BHA And RIH. Circulated on bottom.

Present operations:

R/U ITS equipments. Current depth is 2115'MD (-1707.51'TVDss).

Prognosed operations:

Run 13 3/8" csg. Perform cement job. N/D diverter.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Sist %	Sst %	Sd %	Lmst %				Fluor %	LITHOLOGICAL DESCRIPTION
LOBITOS	1780 - 2020	64	100				TR				NF	CLYST: olv blk, loc olv gy, earthy surf, blkly/sbbly, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. LMST-DOL: dk yel'sh brn, beige, occ brn's gy, mass aspec, hd-md hd, irr frac, mic carb. TG: 34 C1: 2985 C2: 144 C3: 40 C4: 0 C5: 0

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)
1971.23	59.98	231.43	1691.87	-1641.87	771.59	-418.95	-647.95
2044.77	63.42	231.25	1726.73	-1676.73	836.03	-459.39	-698.50
2115.00	64.60	231.00	1757.51	-1707.51	898.88	-499.01	-747.64

Mud information:

Type: Clay Seal
Mud Weight (ppg): 10.0
Viscosity (sec): 49
Filtrate (ml): 8.6

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
Helico			FROM SURFACE		
Lobitos	757.0	752.00	-702.00	-17.04	-63.25

Remarks

So far we have drilled 1358'MD (1006'ft Vss) of mainly claystone with calcite as accessory material within Lobitos fm. Gas average 34 units (C1-C3).

From 1780' to 2080'MD we have mainly claystone with some limestone-dolomite interbedded and gas average 34 units (C1-C3).

Survey Projection at bottom 2215'MD was incl 64.60°, az 231.00°, TVDss -1707.51°, distance respect to plan is 12.11'ft.

Between 1740' - 2115'MD Gamma ray average is 170 API.

ROP average rotating mode is 120, and sliding mode is 60.

Well Cost:

AFE	4 816 710	US\$
DAILY	75 206	US\$
CUMULATED	938 442	US\$



SAVIA
PERÚ

REPORT N° 7

LOBITOS FIELD
LO6-30D GEOLOGICAL DAILY REPORT

Geologists:	<i>D. Paz</i>	OPERATIONS DATE :	9-Mar-14
Mud Loggers:	<i>O. Ojeda/H. Monasterio</i>	REPORT DATE :	10-Mar-14
Rig Contractor:	<i>RIG 40</i>	SPUD DATE:	2-Mar-14
Depth @ 00h00 (ft):	2115	PROGRESS 00h00-24h00 (ft):	0
Depth @ 24h00 (ft):	2115	CONDUCTOR (ft):	18" 450
Depth @ 06h00 (ft):	2115	DRILLING DAYS:	8

Operations summary:

POOH & L/D slick BHA from 2115'ft to surface. Run 13 3/8" Csg. Install 13 3/8" shoe guide, 1 csg joint w/ SR centralizer, float valve, and 13 3/8" csg string to 1625 ft.

Present operations:

R/U Halliburton equipments and cementing lines. Current depth is 2115'MD (-1707.51'TVDss).

Prognosed operations:

Perform cement job. N/U diverter. N/U BOP.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Sist %	Sst %	Sd %	Lmst %				Fluor %	LITHOLOGICAL DESCRIPTION
LOBITOS												

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)

Mud information:

Type: Clay Seal
Mud Weight (ppg): 10.0
Viscosity (sec): 49
Filtrate (ml): 8.6

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
Helico					
Lobitos	757.0	752.00	-702.00	-17.04	-63.25

Remarks

At 1625 'MD personnel worked 13 3/8" csg up & down with circulation but does not possible to continue running the casing. Csg Shoe is 1625'MD, ready to perform cement job.

Well Cost:

AFE	4 816 710	US\$
DAILY	65 369	US\$
CUMULATED	1 003 811	US\$


SAVIA
PERÚ

LOBITOS FIELD
LO6-30D GEOLOGICAL DAILY REPORT

Geologists:	D. Paz	OPERATIONS DATE :	10-Mar-14
Mud Loggers:	O. Ojeda/H. Monasterio	REPORT DATE :	11-Mar-14
Rig Contractor:	RIG 40	SPUD DATE:	2-Mar-14
Depth @ 00h00 (ft):	2115	PROGRESS 00h00-24h00 (ft):	0
Depth @ 24h00 (ft):	2115	CSG (ft):	13 3/8" 1625
Depth @ 06h00 (ft):	2115	DRILLING DAYS:	9

Operations summary:

Continued working up & down csg. 13 3/8" csg sit to 1625'MD & does not discharge weight. R/U Halliburton equipment & cement lines. Tested cement lines with 2150 psi, ok. Performed cement job. Observed no return last 21 bbls. Top plug arrived to bottom with 370 psi. Back flow 1.5 bbls, ok. M/U and TIH 1 1/4" macaroni, tag @ 80 ft. Pump 30 bbls cement, 15.8 ppg through annular. Return cement 14.7 ppg. Observed gas flow with water between 18" cond & 13 3/8" csg. Flow decreases. Prepared Medomack cement lines to pump cement into annular from 2" valve on first level of platform.

Present operations:

N/U BOP stack. Current depth is 2115'MD (-1707.51'TVDss).

Prognosed operations:

Perform pressure test to BOP, MU slick BHA with tooth bit.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Slst %	Sst %	Sd %	Lmst %				Fluor %	LITHOLOGICAL DESCRIPTION
LOBITOS												

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)

Mud information:

Type:	Clay Seal
Mud Weight (ppg):	10.0
Viscosity (sec):	49
Filtrate (ml):	8.6

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
Helico					
Lobitos	757.0	752.00	-702.00	-17.04	-63.25

Remarks

Bad weather. Medomack vessel separates from Perla barge. Strong sea current. Annular under control, well no show gas, and fill annular with 2 bls of mud.

Well Cost:

AFE	4 816 710	US\$
DAILY	183 434	US\$
CUMULATED	1 187 245	US\$


SAVIA
PERÚ

LOBITOS FIELD
LO6-30D GEOLOGICAL DAILY REPORT

Geologists:	D. Paz	OPERATIONS DATE :	11-Mar-14
Mud Loggers:	O. Ojeda/H. Monasterio	REPORT DATE :	12-Mar-14
Rig Contractor:	RIG 40	SPUD DATE:	2-Mar-14
Depth @ 00h00 (ft):	2115	PROGRESS 00h00-24h00 (ft):	0
Depth @ 24h00 (ft):	2115	CSG (ft):	13 3/8" 1625
Depth @ 06h00 (ft):	2115	DRILLING DAYS:	10

Operations summary:

M/U & RIH slick BHA with 12 1/4" tooth bit, from surface to 1575'MD, tag TOC to 1575'MD. Drill out cement from 1575' to 1625'MD. Petrex cleaned formation from 1625' to 1635'MD. Geology confirmed 100% formation. Displaced contaminated mud for new mud 10.3 ppg. Clean 17" well section with 12 1/4" tricone bit from 1635 ft to 2115'MD. Circulated Performed wiper trip to shoe. RIH to bottom. Circulated and POOH slick BHA with 12 1/4" tooth bit from 2115' to surface. L/D slick BHA. M/U & RIH directional BHA w/ 12 1/4" PDC bit from surface to 305'MD.

Present operations:

Drill within Lobitos Mbr. At 2300'MD (-1790'TVDss).

Prognosed operations:

Drill ahead to csg point.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Sist %	Sst %	Sd %	Lmst %				Fluor %	LITHOLOGICAL DESCRIPTION
LOBITOS	2115 - 2200	115	100				TR				NF	CLYST: olv blk, loc olv gy, earthy surf, blk/sbbiky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. LMST-DOL: dk yel'sh brn, beige, occ brn's gy, mass aspec, hd-md hd, irr frac, mic carb. TG: 31 C1: 2775 C2: 120 C3: 34 C4: 0 C5:0

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)

Mud information:

Type:	Clay Seal
Mud Weight (ppg):	10.5
Viscosity (sec):	49
Filtrate (ml):	8.6

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
Helico			FROM SURFACE		
Lobitos	757.0	752.00	-702.00	-17.04	-63.25

Remarks

12 1/4" section started to drill at 05:00hrs.

So far we have drilled 1543'MD (1088'ft Vss) of mainly claystone with dolomite as accessory material within Lobitos fm. Gas average 31 units (C1-C3).

ROP average rotating mode is 115.

Well Cost:

AFE	4 816 710	US\$
DAILY	129 151	US\$
CUMULATED	1 387 355	US\$



SAVIA
PERÚ

REPORT N° 10

LOBITOS FIELD

LO6-30D GEOLOGICAL DAILY REPORT

Geologists:	D. Paz	OPERATIONS DATE :	12-Mar-14
Mud Loggers:	O. Ojeda/H. Monasterio	REPORT DATE :	13-Mar-14
Rig Contractor:	RIG 40	SPUD DATE:	2-Mar-14
Depth @ 00h00 (ft):	2115	PROGRESS 00h00-24h00 (ft):	0
Depth @ 24h00 (ft):	2115	CSG (ft):	13 3/8" 1625
Depth @ 06h00 (ft):	2115	DRILLING DAYS:	11

Operations summary:

Continued working on BOP. Performed pressure test to BOP stack with 300 psi/3000 psi x 5 min - Ok. Pool out plug tester and installed wear bushing.

Present operations:

Drill out cement with conventional BHA at 1620'MD. Current depth is 2115'MD (-1707.51'TVDss).

Prognosed operations:

Clean hole at 2115'MD. POOH slick BHA. M/U & RIH directional BHA. Drill ahead.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Sist %	Sst %	Sd %	Lmst %				Fluor %	LITHOLOGICAL DESCRIPTION
LOBITOS												

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)

Mud information:

Type: Clay Seal
Mud Weight (ppg): 10.5
Viscosity (sec): 49
Filtrate (ml): 8.6

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
Helico			FROM SURFACE		
Lobitos	757.0	752.00	-702.00	-17.04	-63.25

Remarks

12 1/4" section will start today at midnight.

Well Cost:

AFE	4 816 710	US\$
DAILY	70 959	US\$
CUMULATED	1 258 204	US\$

TEREBRA TULA	3010 - 3120	148	50		10	40					TR - 5	SD: wh, 70%vf/f, 30% m, TR C qtz grns, hyal, transl, sbang/sbrnd, fr srt. CLYST: olv blk, loc olv gy, earthy surf, blk/sbbly, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. SST: md lt gy, lt gy, vf-f qtz gr, hyal, trns, sbang-sbrnd, wl srted, arg mtrx i/p, calc cmt, mod fri-fri, loc ti, occ drty, w/dk mnrls incl, micmic i/p, occ miccarb, p vis por. FLUO: NVOS, pin-point, pal, yel'sh wh nat fluo, slw, wk, faint, even, pal, yel'sh wh cut fluo, mlky wh res ring under U.V. lt, no res ring at nat lt, POS. TG: 149 C1: 11076 C2: 760 C3: 558 C4: 127 C5: 21
CHACRA	3120 - 3250	145	100								NF	CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbbly, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. TG: 95 C1: 7663 C2: 406 C3: 245 C4: 56 C5: 17

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)
2912.70	65.68	229.16	2087.81	-2037.81	1621.89	-964.94	-1303.61
3010.78	65.72	229.29	2128.17	-2078.17	1711.04	-1023.32	-1371.30
3104.79	65.64	229.25	2166.89	-2116.89	1796.51	-1079.22	-1436.22

Mud information:

Type:	Clay Seal
Mud Weight (ppg):	10.6
Viscosity (sec):	50
Filtrate (ml):	6.8

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
Helico					
			FROM SURFACE		
Lobitos	757.0	752.00	-702.00	-17.04	-63.25
Terebratula	2855.0	2064.00	-2014.00	-930.49	-1263.90
Chacra	3120.0	2173.16	-2123.16	-1088.26	-1446.72

Remarks

So far we have drilled 224' MD (93' Vss) of mainly claystone with dolomite as accessory material within Chacra fm. Gas average 95 units (C1-C5).

Between 2855' - 3120' MD we have mainly sand and sandstone, and some claystone; with fluorescence until up 20% (NVOS, pin-point, pal, yel'sh wh nat fluo, slw, wk, faint, even, pal, yel'sh wh cut fluo, mlky wh res ring under U.V. lt, no res ring at nat lt, POS). Gas average 150 units (C1-C5).

Gamma ray readings within Terebratula fm are 150 API.

Last survey at 3104.79' MD was incl 65.64°, az 229.25°, TVDss -2116.89°, distance respect to plan is 14.13' ft.

ROP average rotating mode is 150.

Well Cost:

AFE	4 816 710	US\$
DAILY	77 421	US\$
CUMULATED	1 464 776	US\$



SAVIA
PERÚ

REPORT N° 11
LOBITOS FIELD
LO6-30D GEOLOGICAL DAILY REPORT

Geologists: D. Paz
Mud Loggers: O. Ojeda/H. Monasterio
Rig Contractor: RIG 40
Depth @ 00h00 (ft): 2115
Depth @ 24h00 (ft): 2867
Depth @ 06h00 (ft): 3250

OPERATIONS DATE : 13-Mar-14
REPORT DATE : 14-Mar-14
SPUD DATE: 2-Mar-14
PROGRESS 00h00-24h00 (ft): 752
CSG (ft): 13 3/8" 1625
DRILLING DAYS: 12

Operations summary:

RIH directional BHA from 305' to 2115'MD. Drilling rotating from 2115' to 2867'MD. Circulated. Wiper trip to 13 3/8" csg shoe. RIH at bottom. Circulated.

Present operations:

Drilling rotating at 3344'MD (-'2216'TVDss), within Chacra fm.

Prognosed operations:

Drill ahead to csg point.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Slst %	Sst %	Sd %	Lmst %				Fluor %	LITHOLOGICAL DESCRIPTION
LOBITOS	2200 - 2485	157	100				TR				NF	CLYST: olv blk, loc olv gy, earthy surf, blk/sbblky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. LMST-DOL: dk yel'sh brn, beige, occ brn's gy, mass aspec, hd-md hd, irr frac, mic carb. TG: 17 C1: 1442 C2: 70 C3: 26 C4: 1 C5: 0
LOBITOS	2485 - 2830	189	100				TR				NF	CLYST: olv blk, loc olv gy, earthy surf, blk/sbblky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. LMST-DOL: dk yel'sh brn, beige, occ brn's gy, mass aspec, hd-md hd, irr frac, mic carb. TG: 32 C1: 2743 C2: 133 C3: 64 C4: 10 C5: 1
LOBITOS	2830 - 2855	118	80		10		10				NF	CLYST: olv blk, loc olv gy, earthy surf, blk/sbblky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. LMST-DOL: dk yel'sh brn, beige, occ brn's gy, mass aspec, hd-md hd, irr frac, mic carb. SST: md lt gy, lt gy, vf-f qtz gr, hyal, trns, sbang-sbrnd, wl srt, arg mtrx i/p, calc cmt, mod fri-fri, loc ti, occ drty, w/dk mnrls incl, micmic i/p, occ miccarb, p vis por. TG: 80 C1: 6627 C2: 302 C3: 178 C4: 35 C5: 10
TEREBRA TULA	2855 - 2950	149	30		20	50					TR - 20	SD: wh, 70%vf/f, 30% m, TR C qtz grns, hyal, transl, sbang/sbrnd, fr srt. CLYST: olv blk, loc olv gy, earthy surf, blk/sbblky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. SST: md lt gy, lt gy, vf-f qtz gr, hyal, trns, sbang-sbrnd, wl srt, arg mtrx i/p, calc cmt, mod fri-fri, loc ti, occ drty, w/dk mnrls incl, micmic i/p, occ miccarb, p vis por. FLUO: NVOS, pin-point, pal, yel'sh wh nat fluo, slw, wk, faint, even, pal, yel'sh wh cut fluo, mlky wh res ring under U.V. It, no res ring at nat lt, POS. TG: 144 C1: 10701 C2: 745 C3: 552 C4: 109 C5: 16
TEREBRA TULA	2950 - 3010	182	70		10	20					TR	CLYST: olv blk, loc olv gy, earthy surf, blk/sbblky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. SD: wh, 70%vf/f, 30% m, TR C qtz grns, hyal, transl, sbang/sbrnd, fr srt. SST: md lt gy, lt gy, vf-f qtz gr, hyal, trns, sbang-sbrnd, wl srt, arg mtrx i/p, calc cmt, mod fri-fri, loc ti, occ drty, w/dk mnrls incl, micmic i/p, occ miccarb, p vis por. FLUO: NVOS, pin-point, pal, yel'sh wh nat fluo, slw, wk, faint, even, pal, yel'sh wh cut fluo, mlky wh res ring under U.V. It, no res ring at nat lt, POS. TG: 93 C1: 6802 C2: 473 C3: 375 C4: 88 C5: 16



SAVIA
PERÚ

REPORT N° 12

LOBITOS FIELD

LO6-30D GEOLOGICAL DAILY REPORT

Geologists: D. Paz
Mud Loggers: O. Ojeda/H. Monasterio
Rig Contractor: RIG 40
Depth @ 00h00 (ft): 2867
Depth @ 24h00 (ft): 3717
Depth @ 06h00 (ft): 3908

OPERATIONS DATE : 14-Mar-14
REPORT DATE : 15-Mar-14
SPUD DATE: 2-Mar-14
PROGRESS 00h00-24h00 (ft): 850
CSG (ft): 13 3/8" 1625
DRILLING DAYS: 13

Operations summary:

Drilled rotating from 2867' to 3717'MD. Pumped sweep pill. Circulated. Performed wiper trip to 13 3/8" csg shoe.

Present operations:

Drilling rotating at 3908'MD (-2451'TVDss), within Chacra fm.

Prognosed operations:

Drill ahead to csg point.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Sist %	Sst %	Sd %	Lmst %				Fluor %	LITHOLOGICAL DESCRIPTION
CHACRA	3250 - 3625	139	100	TR							NF	CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blkly/sbblky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. SLTST: md gy, md dk gy, earthy surf, blkly/sbblky, irr, md frm/frm, mic mic i/p, mic carb, occ grad to vf sst, sl calc. TG: 58 C1: 4830 C2: 240 C3: 119 C4: 25 C5: 9
CHACRA	3625 - 3880	115	100								NF	CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blkly/sbblky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. TG: 46 C1: 3890 C2: 195 C3: 97 C4: 19 C5: 0

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)
3668.05	65.09	228.96	2400.49	-2350.49	2308.04	-1413.08	-1825.10
3766.24	64.98	229.10	2441.93	-2391.93	2396.97	-1471.44	-1892.31
3858.52	65.13	229.23	2480.85	-2430.85	2480.57	-1526.15	-1955.62

Mud information:

Type: Clay Seal
Mud Weight (ppg): 10.9
Viscosity (sec): 48
Filtrate (ml): 6.6

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
Helico			FROM SURFACE		
Lobitos	757.0	752.00	-702.00	-17.04	-63.25
Terebratula	2855.0	2064.00	-2014.00	-930.49	-1263.90
Chacra	3120.0	2173.16	-2123.16	-1088.26	-1446.72

Remarks

So far we have drilled 788'MD (328'ft Vss) of mainly claystone with dolomite as accessory material within Chacra fm. Gas average 48 units (C1-C5).

Gamma ray readings within Chacra fm are 150 API.

Last survey at 3858.52'MD was incl 65.13°, az 229.23°, TVDss -2430.85°, distance respect to plan is 30.03'ft.

ROP average rotating mode is 120.

Well Cost:

AFE 4 816 710 US\$
DAILY 86 818 US\$
CUMULATED 1 551 594 US\$


SAVIA
PERÚ

LOBITOS FIELD
LO6-30D GEOLOGICAL DAILY REPORT

Geologists: D. Paz
Mud Loggers: O. Ojeda/H. Monasterio
Rig Contractor: RIG 40
Depth @ 00h00 (ft): 3717
Depth @ 24h00 (ft): 4569
Depth @ 06h00 (ft): 4569

OPERATIONS DATE : 15-Mar-14
REPORT DATE : 16-Mar-14
SPUD DATE: 2-Mar-14
PROGRESS 00h00-24h00 (ft): 852
CSG (ft): 13 3/8" 1625
DRILLING DAYS: 14

Operations summary:

RIH at bottom. Circulated. Drilled rotating from 3717' to 4571'MD. Pumped sweep pill. Circulated.

Present operations:

POOH at 1700'MD. Current depth is 4571'MD (-2726'TVDss).

Prognosed operations:

Perform wiper trip to Csg shoe. Drill ahead to 5700'MD.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Sist %	Sst %	Sd %	Lmst %				Fluor %	LITHOLOGICAL DESCRIPTION
CHACRA	3880 - 4325	69	100								NF	CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbblky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. TG: 49 C1: 4023 C2: 220 C3: 105 C4: 20 C5: 0
CHACRA	4325 - 4360	87	70		20	10					NF	CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbblky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. SST: lt gry, med lt gry, vf-f qtz gr, hyal, trnsi, sbang-sbrnd, wl srtd, scse arg mtrx, calc cmt, mod fri-mod consol, occ ti, w/dk&gnsh mnrls incls, micmic i/p, p vis por. SD: wh, 90% f-vf, 10% m qtz gr, hyal, trnsi, sbang-sbrnd, fr srtd. TG: 61 C1: 5037 C2: 269 C3: 141 C4: 30 C5: 0
CHACRA	4360 - 4569	97	100								NF	CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbblky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. TG: 47 C1: 3778 C2: 213 C3: 117 C4: 25 C5: 0

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)
4332.74	65.29	230.32	2677.51	-2627.51	2911.94	-1802.57	-2286.96
4425.27	65.21	230.16	2716.25	-2666.25	2995.94	-1856.31	-2351.56
4520.60	65.29	229.77	2756.16	-2706.16	3082.48	-1912.00	-2417.84

Mud information:

Type: Clay Seal
Mud Weight (ppg): 10.9
Viscosity (sec): 48
Filtrate (ml): 6.6

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
Helico					
Lobitos	757.0	752.00	-702.00	-17.04	-63.25
Terebratula	2855.0	2064.00	-2014.00	-930.49	-1263.90
Chacra	3120.0	2173.16	-2123.16	-1088.26	-1446.72

Remarks

So far we have drilled 1450'MD (603'ft Vss) of mainly claystone with dolomite as accessory material within Chacra fm. Gas average 48 units (C1-C4).

Between 4330' – 4360'MD we have some sand and sandstone interbedded with claystone; without natural fluorescence. Gas average 61 units (C1-C4).

Last survey at 4520'MD was incl 65.29°, az 229.77°, TVDss -2706', distance respect to plan is 37'ft.

ROP average rotating mode is 80.

Gamma ray readings within Chacra fm are 150 API.

Well Cost:

AFE	4 816 710	US\$
DAILY	87 039	US\$
CUMULATED	1 638 633	US\$



SAVIA
PERÚ

REPORT N° 14

LOBITOS FIELD

LO6-30D GEOLOGICAL DAILY REPORT

Geologists:	D. Paz	OPERATIONS DATE :	16-Mar-14
Mud Loggers:	O. Ojeda/H. Monasterio	REPORT DATE :	17-Mar-14
Rig Contractor:	RIG 40	SPUD DATE:	2-Mar-14
Depth @ 00h00 (ft):	4569	PROGRESS 00h00-24h00 (ft):	0
Depth @ 24h00 (ft):	4569	CSG (ft):	13 3/8" 1625
Depth @ 06h00 (ft):	4569	DRILLING DAYS:	15

Operations summary:

Performed wiper trip from 4569' to 1600'MD. Circulated. RIH directional BHA from 1600' to 4150'MD. At 4150'MD observed leak on rotary hose. POOH from 4150' to 1550'MD to change mud hose. Pepesa crew changed mud hose.

Present operations:

RIH at 3100'MD. Current depth is 4571'MD (-2726'TVDss).

Prognosed operations:

RIH to bottom. Drill ahead to 5700'MD.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Sist %	Set %	Sd %	Lmst %				Fluor %	LITHOLOGICAL DESCRIPTION
CHACRA												

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)

Mud information:

Type:	Clay Seal
Mud Weight (ppg):	10.9
Viscosity (sec):	48
Filtrate (ml):	6.6

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
Helico					
Lobitos	757.0	752.00	-702.00	-17.04	-63.25
Terebratula	2855.0	2064.00	-2014.00	-930.49	-1263.90
Chacra	3120.0	2173.16	-2123.16	-1088.26	-1446.72

Remarks

When Pepesa crew was RIH at 4100'MD, they had problems with mud hose. Company man suggested changing mud hose by new one. POOH at csg shoe to change mud hose.

So far we have drilled 1450'MD (603'ft Vss) of mainly claystone with dolomite as accessory material within Chacra fm. Gas average 48 units (C1-C4).

Well Cost:

AFE	4 816 710	US\$
DAILY	84 194	US\$
CUMULATED	1 722 827	US\$



SAVIA
PERÚ

REPORT N° 15

LOBITOS FIELD

LO6-30D GEOLOGICAL DAILY REPORT

Geologists: D. Paz
Mud Loggers: O. Ojeda/H. Monasterio
Rig Contractor: RIG 40
Depth @ 00h00 (ft): 4569
Depth @ 24h00 (ft): 4946
Depth @ 06h00 (ft): 5300

OPERATIONS DATE : 17-Mar-14
REPORT DATE : 18-Mar-14
SPUD DATE: 2-Mar-14
PROGRESS 00h00-24h00 (ft): 377
CSG (ft): 13 3/8" 1625
DRILLING DAYS: 16

Operations summary:

Continued rig service (changed mud hose). RIH directional BHA from 1550' to 4569'MD. Drilled rotating from 4569' to 4946'MD.

Present operations:

Drilling rotating at 5333'MD (-3043'TVDss).

Prognosed operations:

Drill ahead to 5700'MD.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Sist %	Sst %	Sd %	Lmst %				Fluor %	LITHOLOGICAL DESCRIPTION
CHACRA	4569 - 4895	105	100								NF	CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbblky, occ sbplty, occ irr, md frm/frm, mic mic, mic carb, sl calc. TG: 43 C1: 3515 C2: 178 C3: 89 C4: 35 C5: 0
CHACRA	4895 - 5230	158	100	TR							NF	CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbblky, occ sbplty, occ irr, md frm/frm, mic mic, mic carb, sl calc. SLTST: md dk gy, md gy, earthy surf, blk/sbblky, irr, md frm/frm, mic mic, mic carb, grad to vf sst, sl calc i/p. TG: 49 C1: 3867 C2: 210 C3: 121 C4: 61 C5: 0

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)
4994.29	65.30	230.55	2954.23	-2904.23	3512.64	-2187.74	-2748.16
5089.98	65.03	230.68	2994.42	-2944.42	3599.47	-2242.85	-2815.28
5182.19	65.38	231.20	3033.09	-2983.09	3683.17	-2295.59	-2880.28

Mud information:

Type: Clay Seal
Mud Weight (ppg): 10.9
Viscosity (sec): 48
Filtrate (ml): 6.6

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
Helico					
			FROM SURFACE		
Lobitos	757.0	752.00	-702.00	-17.04	-63.25
Terebratula	2855.0	2064.00	-2014.00	-930.49	-1263.90
Chacra	3120.0	2173.16	-2123.16	-1088.26	-1446.72

Remarks

So far we have drilled 2213'MD (920'ft Vss) of mainly claystone with dolomite as accessory material within Chacra fm. Gas average 45 units (C1-C4).

Between 4569' – 5230'MD we have gas average 46 units (C1-C4).

Last survey at 5182'MD was incl 65.38°, az 231.20°, TVDss -2983', distance respect to plan is 41'ft.

ROP average rotating mode is 130.

Gamma ray readings within Chacra fm are 150 API.

Well Cost:

AFE 4 816 710 US\$
DAILY 74 520 US\$
CUMULATED 1 797 347 US\$


SAVIA
PERÚ

LOBITOS FIELD

LO6-30D GEOLOGICAL DAILY REPORT

Geologists:	D. Paz	OPERATIONS DATE :	18-Mar-14
Mud Loggers:	O. Ojeda/H. Monasterio	REPORT DATE :	19-Mar-14
Rig Contractor:	RIG 40	SPUD DATE:	2-Mar-14
Depth @ 00h00 (ft):	4946	PROGRESS 00h00-24h00 (ft):	729
Depth @ 24h00 (ft):	5675	CSG (ft):	13 3/8" 1625
Depth @ 06h00 (ft):	5675	DRILLING DAYS:	17

Operations summary:

Drilled rotating from 4946' to 5675'MD. Csg point. Circulated to recovered bottom sample. POOH at surface and L/D directional BHA & 12 1/4"PDC bit at 4390'MD.

Present operations:

POOH directional BHA at 3400'MD. Current depth is 5675'MD (-3184'TVDss).

Prognosed operations:

POOH directional BHA to surface. M/U slick BHA & RIH to bottom.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Sist %	Sst %	Sd %	Lmst %				Fluor %	LITHOLOGICAL DESCRIPTION
CHACRA	5230 - 5320	130	100								NF	CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blkly/sbbkly, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. TG: 36 C1: 2811 C2: 166 C3: 82 C4: 44 C5: 0
CHACRA	5320 - 5535	108	80	10			10				NF	CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blkly/sbbkly, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. LSMT-DOL: dk yell'sh brn, dk brn, mass aspec, sbbkly, irr fract, hd/v hd, mic carb i/p. SLTST: md dk gy, md gy, earthy surf, blkly/sbbkly, irr, md frm/frm, mic mic, mic carb, grad to vf sst, sl calc i/p. TG: 37 C1: 2907 C2: 165 C3: 87 C4: 45 C5: 1
CHACRA	5535 - 5675	90	90	10	TR						NF	CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blkly/sbbkly, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. SST: md gy, md lt gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, arg mtz, calc cmnt, md fri, w/dk lithcs grns, p vis por. SLTST: md dk gy, md gy, earthy surf, blkly/sbbkly, irr, md frm/frm, mic mic, mic carb, grad to vf sst, sl calc i/p. TG: 59 C1: 4608 C2: 236 C3: 147 C4: 85 C5: 11

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)
5561.50	65.93	229.52	3188.37	-3138.37	4029.15	-2516.00	-3147.07
5628.52	66.01	229.09	3215.66	-3165.66	4090.31	-2555.91	-3193.48
5675.00	66.00	229.00	3234.56	-3184.56	4132.73	-2583.74	-3225.55

Mud information:

Type:	Clay Seal
Mud Weight (ppg):	10.9
Viscosity (sec):	48
Filtrate (ml):	6.6

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
Helico					
Lobitos	757.0	752.00	-702.00	-17.04	-63.25
Terebratula	2855.0	2064.00	-2014.00	-930.49	-1263.90
Chacra	3120.0	2173.16	-2123.16	-1088.26	-1446.72

Remarks

So far we have drilled 2555'MD (1061'ft Vss) of mainly claystone with dolomite and calcite as accessory material. Very occasionally Siltstone interbedded within Chacra fm. Gas average 70 units (C1-C4).
Between 5525' - 5575'MD we have mainly claystone, some siltstone and sandstone until up 10%, without natural fluorescence. Gamma Ray readings average is 135 API. Gas average 25 units (C1-C4).
Last survey at 5628'MD was incl 66.01°, az 229.09°, TVDss -3166', distance about to plan is 46'ft. Surveys will be corrected by magnetic interference.
ROP average rotating mode is 90.
Gamma ray readings within Chacra fm are 145 API.

Well Cost:

AFE	4 816 710	US\$
DAILY	87 976	US\$
CUMULATED	1 885 323	US\$



SAVIA
PERÚ

REPORT N° 17

LOBITOS FIELD

LO6-30D GEOLOGICAL DAILY REPORT

Geologists:	D. Paz	OPERATIONS DATE :	22-Mar-14
Mud Loggers:	O. Ojeda/H. Monasterio	REPORT DATE :	23-Mar-14
Rig Contractor:	RIG 40	SPUD DATE:	2-Mar-14
Depth @ 00h00 (ft):	5675	PROGRESS 00h00-24h00 (ft):	0
Depth @ 24h00 (ft):	5675	CSG (ft):	9 5/8" 5673
Depth @ 06h00 (ft):	5675	DRILLING DAYS:	21

Operations summary:

Run 9 5/8" csg from surface to 5673 ft. Circulated to 5673 ft with 700 gpm and 590 psi, meanwhile Halliburton Rig Up lines.

Present operations:

Displace cement with mud. Current depth is 5675' MD (-3184' TVDss).

Prognosed operations:

Perform cement job. R/D cementing lines. Work on BOP stack 13 5/8".

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Sist %	Sst %	Sd %	Lmst %				Fluor %	LITHOLOGICAL DESCRIPTION
CHACRA												

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)

Mud information:

Type: Clay Seal
Mud Weight (ppg): 10.9
Viscosity (sec): 48
Filtrate (ml): 6.6

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
Helico			FROM SURFACE		
Lobitos	757.0	752.00	-702.00	-17.04	-63.25
Terebratula	2855.0	2064.00	-2014.00	-930.49	-1263.90
Chacra	3120.0	2173.16	-2123.16	-1088.26	-1446.72

Remarks

Pepesa crew will start 8 1/2" section tomorrow in the afternoon.

Well Cost:

AFE	4 816 710	US\$
DAILY	208 300	US\$
CUMULATED	2 328 900	US\$



SAVIA
PERÚ

REPORT N° 18

LOBITOS FIELD
LO6-30D GEOLOGICAL DAILY REPORT

Geologists:	D. Paz	OPERATIONS DATE :	23-Mar-14
Mud Loggers:	O. Ojeda/H. Monasterio	REPORT DATE :	24-Mar-14
Rig Contractor:	RIG 40	SPUD DATE:	2-Mar-14
Depth @ 00h00 (ft):	5675	PROGRESS 00h00-24h00 (ft):	0
Depth @ 24h00 (ft):	5675	CSG (ft):	9 5/8" 5673
Depth @ 06h00 (ft):	5675	DRILLING DAYS:	22

Operations summary:

Performed cement job. R/D Halliburton cement head and lines. Pepesa crew performed pressure test BOP.

Present operations:

M/U & RIH directional BHA at 250'MD. Current depth is 5675'MD (-3184'TVDss).

Prognosed operations:

Drill out cement. Perform casing integrity test. Drill out cement. Formation integrity test. Drill formation.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Slst %	Sst %	Sd %	Lmst %				Fluor %	LITHOLOGICAL DESCRIPTION
CHACRA												

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)

Mud information:

Type: Clay Seal
Mud Weight (ppg): 10.9
Viscosity (sec): 48
Filtrate (ml): 6.6

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
Helico					
Lobitos	757.0	752.00	-702.00	-17.04	-63.25
Terebratula	2855.0	2064.00	-2014.00	-930.49	-1263.90
Chacra	3120.0	2173.16	-2123.16	-1088.26	-1446.72

Remarks

Pepesa crew going to start 8 1/2" section today in the afternoon.

Well Cost:

AFE	4 816 710	US\$
DAILY	118 017	US\$
CUMULATED	2 446 917	US\$



SAVIA
PERÚ

REPORT N° 19

LOBITOS FIELD

LO6-30D GEOLOGICAL DAILY REPORT

Geologists:	D. Paz	OPERATIONS DATE :	24-Mar-14
Mud Loggers:	O. Ojeda/H. Monasterio	REPORT DATE :	25-Mar-14
Rig Contractor:	RIG 40	SPUD DATE:	2-Mar-14
Depth @ 00h00 (ft):	5675	PROGRESS 00h00-24h00 (ft):	61
Depth @ 24h00 (ft):	5736	CSG (ft):	9 5/8" 5673
Depth @ 06h00 (ft):	6080	DRILLING DAYS:	23

Operations summary:

M/U directional BHA with 8 1/2" PDC bit. RIH from surface to 5583'MD. DOC from 5583' to 5675'MD. Drilled 15'ft of formation. Displaced mud by 10.9ppg new mud. Performed formation integrity test. Ok. Drilled rotating from 5690' to 5736'MD.

Present operations:

Drill rotating at 6144'MD (-3371'TVDss).

Prognosed operations:

Drill ahead at 6429'MD. Wiper trip at 9 5/8" csg shoe.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Sist %	Sst %	Sd %	Lmst %				Fluor %	LITHOLOGICAL DESCRIPTION
CHACRA	5675 - 5810	116	80	10	10	TR					NF	CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blkly/sbbkly, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. SST: md gy, md lt gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, arg mbx, calc cmnt, md fri, w/dk lithcs grns, p vis por. SLTST: md dk gy, md gy, earthy surf, blkly/sbbkly, irr, md frm/frm, mic mic, mic carb, grad to vf sst, sl calc i/p. SD: wh, 80%f, 20%g, TR c qtz grns, hyal, trans, sbrnd/sbang, w srt, occ dk lithcs grns. TG: 12 C1: 1035 C2: 45 C3: 22 C4: 9 C5: 0
CHACRA	5810 - 5895	122	30		20	50					TR - 30	SD: wh, lt gy, 90%f, 10%g, TR c qtz grns, hyal, trans, sbrnd/sbang, w srt, occ dk lithcs grns. SST: v lt gy, lt gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, sl arg mbx, calc cmnt, md fri, w/dk & grn lithcs grns incl, w/pyr on surf, p vis por. CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blkly/sbbkly, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. FLUO: NVOS, pin-point, faint, pale yell nat fluo, slow, wk, faint, even, pal yel/sh wh cut fluo, milky wh res ring under UV lt, no res ring at nat fluo, P-FOS. TG: 45 C1: 3678 C2: 169 C3: 97 C4: 56 C5: 3
CHACRA	5895 - 6090	131	80	20	TR	TR					NF	CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blkly/sbbkly, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. SST: v lt gy, lt gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, sl arg mbx, calc cmnt, md fri, w/dk & grn lithcs grns incl, w/pyr on surf, p vis por. SLTST: md dk gy, md gy, earthy surf, blkly/sbbkly, irr, md frm/frm, mic mic, mic carb, grad to vf sst, sl calc i/p. SD: wh, 90%f, 10%g, TR c qtz grns, hyal, trans, sbrnd/sbang, w srt, occ dk lithcs grns. TG: 12 C1: 1035 C2: 45 C3: 22 C4: 9 C5: 0

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)
5817.78	65.32	228.95	3294.23	-3244.23	4263.61	-2625.95	-3359.11
5812.48	65.65	229.29	3333.53	-3283.53	4349.70	-2682.35	-3424.26
6009.10	65.56	230.36	3373.43	-3323.43	4437.65	-2739.11	-3491.49

Mud information:

Type:	Clay Seal
Mud Weight (ppg):	10.9
Viscosity (sec):	34
Filtrate (ml):	8.0

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
Helico			FROM SURFACE		
Lobitos	757.0	752.00	-702.00	-17.04	-63.25
Terebratula	2855.0	2064.00	-2014.00	-930.49	-1263.90
Chacra	3120.0	2173.16	-2123.16	-1088.26	-1446.72

Remarks

So far we have drilled 3024'MD (1248'ft Vss) of mainly claystone with dolomite and calcite as accessory material. Very occasionally Siltstone and Sandstone interbedded within Chacra fm. Gas average 70 units (C1-C4).

Between 5810' - 5895'MD we have mainly Sand and Sandstone very fine to fine grains with Tr-30% of natural fluorescence (NVOS, pin-point, faint, pale yell nat fluo, slow, wk, faint, even, pal yel/sh wh cut fluo, milky wh res ring under UV lt, no res ring at nat fluo, P-FOS). Gamma Ray readings average is 65 API. Gas average 90 units (C1-C5).

All surveys taken on 12 1/4" section were corrected by magnetic interference.

Last survey at 6009'MD was incl 66.56°, az 230.36°, TVDss -3323', distance about to plan is 2.66'ft.

ROP average rotating mode is 120.

Gamma ray readings within Chacra fm are 110 API. (8 1/2" section).

Well Cost:

AFE	4 816 710	US\$
DAILY	99 504	US\$
CUMULATED	2 546 421	US\$

So far we have drilled 1370'MD (571'ft Vss) of mainly sand and sandstone interbedded with some claystone within RIO BRAVO fm; cuttings show natural fluorescence. Gas average 7d0 units (C1-C5).

Between 6630' – 7130'MD we have mainly Sand and Sandstone very fine to fine grains, sl consl, w/some dk lithcs and grn grains incl, p-f vis por; with natural fluorescence (NVOS, Tr -30% pin point pl yel nat fluor, slw-crsh, wk, fnt, even, yelsh wh cut fluor, mlky wh res ring under U. V. It, no res ring at nat It. POS). Gamma Ray readings average is 80 API. Gas average 40 units (C1-C5).

The interval 7130'-7186'MD we have Sandstone lt brn'sh gy, very calcareous, vf-f grns, md consl/consl & p vis por; with 5-10% natural fluorescence.

The interval 6643' - 6665'MD does not showed representative gas readings due Pepesa changed mesh shakers.

Last survey at 7039'MD was incl 59.61°, az 229.87°, TVDss -3778.73', distance about to plan is 2.66'ft.

ROP average rotating mode is 135.

Well Cost:

AFE	4 816 710	US\$
DAILY	96 009	US\$
CUMULATED	2 642 430	US\$

RIO BRAVO	6495 - 6590	130	10		20	70				30 - TR	SD: wh, lt gy, 90% <i>f</i> , 10% <i>m</i> , TR c qtz grns, hyal, trans, sbrnd/sbang, w srt, occ dk lithcs grns. SST: v lt gy, lt gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, sl arg mtz, calc cmnt, md fri, w/dk & grn lithcs grns incl , w/pyr on surf, p vis por. CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbbilky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. FLUO: NVOS, pin-point, faint, pale yell nat fluo, slow, wk, faint, even, pal yel'sh wh cut fluo, milky wh res ring under UV lt, no res ring at nat fluo, P-FOS. TG: 94 C1: 6909 C2: 424 C3: 264 C4: 191 C5: 23
RIO BRAVO	6590 - 6727	102	30		20	50				TR	SD: wh, lt gy, 10% <i>VF</i> , 70% <i>f</i> , 20% <i>m</i> , tr C qtz grns, hyal, trans, sbrnd/sbang, w srt, occ dk lithcs grns. SST: v lt gy, lt gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, sl arg mtz, calc cmnt, md fri, w/dk & grn lithcs grns incl , w/pyr on surf, p vis por. CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbbilky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. FLUO: NVOS, pin-point, faint, pale yell nat fluo, slow, wk, faint, even, pal yel'sh wh cut fluo, milky wh res ring under UV lt, no res ring at nat fluo, P-FOS. TG: 32 C1: 2458 C2: 133 C3: 76 C4: 54 C5: 11
RIO BRAVO	6727 - 6875	146	30	20	20	30				10 - TR	SD: wh, lt gy, 10% <i>VF</i> , 70% <i>f</i> , 20% <i>m</i> , tr C qtz grns, hyal, trans, sbrnd/sbang, w srt, occ dk lithcs grns. SST: v lt gy, lt gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, sl arg mtz, calc cmnt, md fri, w/dk & grn lithcs grns incl , w/pyr on surf, p vis por. CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbbilky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. FLUO: NVOS, pin-point, faint, pale yell nat fluo, slow, wk, faint, even, pal yel'sh wh cut fluo, milky wh res ring under UV lt, no res ring at nat fluo, P-FOS. TG: 44 C1: 3396 C2: 187 C3: 101 C4: 66 C5: 10
RIO BRAVO	6875 - 7130	143	30	TR	40	30				TR	SD: wh, lt gy, 10% <i>VF</i> , 70% <i>f</i> , 20% <i>m</i> , tr C qtz grns, hyal, trans, sbrnd/sbang, w srt, occ dk lithcs grns. SST: v lt gy, lt gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, sl arg mtz, calc cmnt, md fri, w/dk & grn lithcs grns incl , w/pyr on surf, p vis por. CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbbilky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. FLUO: NVOS, pin-point, faint, pale yell nat fluo, slow, wk, faint, even, pal yel'sh wh cut fluo, milky wh res ring under UV lt, no res ring at nat fluo, P-FOS. TG: 26 C1: 2156 C2: 101 C3: 44 C4: 23 C5: 8
RIO BRAVO	7130 - 7186	150	20		60	20				5 - 10	SST: v lt brn'sh gy, some lt gy/v lt gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, v calcareous mtz, some arg mtz, calc cmnt, md consl/consl, w/some dk lithcs grns incl , vp vis por. SD: wh, lt gy, 10% <i>VF</i> , 70% <i>f</i> , 20% <i>m</i> , tr C qtz grns, hyal, trans, sbrnd/sbang, w srt, occ dk lithcs grns. CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbbilky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. FLUO: NVOS, pin-point, faint, pale yell nat fluo, slow, wk, faint, even, pal yel'sh wh cut fluo, milky wh res ring under UV lt, no res ring at nat fluo, P-FOS. TG: 47 C1: 3717 C2: 198 C3: 91 C4: 56 C5: 12

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)
6850.97	61.03	231.24	3734.62	-3684.62	5197.77	-3219.15	-4080.93
6946.58	59.50	230.79	3782.04	-3732.04	5280.78	-3271.38	-4145.46
7038.73	59.61	229.87	3828.73	-3778.73	5360.20	-3322.09	-4206.61

Mud information:

Type:	Clay Seal
Mud Weight (ppg):	11.2
Viscosity (sec):	47
Filtrate (ml):	5.8

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
Helico			FROM SURFACE		
Lobitos	757.0	752.00	-702.00	-17.04	-63.25
Terebratula	2855.0	2064.00	-2014.00	-930.49	-1263.90
Chacra	3120.0	2173.16	-2123.16	-1088.26	-1446.72
Rio Bravo	5816.0	3293.49	-3243.49	-2624.89	-3357.89

Remarks



SAVIA
PERÚ

REPORT N° 20

LOBITOS FIELD

LO6-30D GEOLOGICAL DAILY REPORT

Geologists:	D. Paz	OPERATIONS DATE :	25-Mar-14
Mud Loggers:	O. Ojeda/H. Monasterio	REPORT DATE :	26-Mar-14
Rig Contractor:	RIG 40	SPUD DATE:	2-Mar-14
Depth @ 00h00 (ft):	5736	PROGRESS 00h00-24h00 (ft):	1076
Depth @ 24h00 (ft):	6812	CSG (ft):	9 5/8" 5673
Depth @ 06h00 (ft):	7186	DRILLING DAYS:	24

Operations summary:

Drilled rotating from 5736' to 6426'MD. Wiper trip to 9 5/8" csg shoe. RIH. Drilled rotating from 6426' to 6806'MD.

Present operations:

Circulating at 7186'MD to perform wiper trip at 9 5/8" csg shoe.

Prognosed operations:

Wiper trip at 9 5/8" csg shoe. RIH. Drill ahead.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Sist %	Sst %	Sd %	Lmst %				Fluor %	LITHOLOGICAL DESCRIPTION
RIO BRAVO	6090 - 6168	111	80	10	10						NF	CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbbly, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. SST: v lt gy, lt gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, sl arg mtx, calc cmnt, md fri, w/dk & grn lithcs grns incl, w/pyr on surf, p vis por. SLTST: md dk gy, md gy, earthy surf, blk/sbbly, irr, md frm/frm, mic mic, mic carb, grad to vf sst, sl calc i/p. TG: 51 C1: 3814 C2: 222 C3: 136 C4: 98 C5: 15
RIO BRAVO	6168 - 6290	92	TR		30	70					TR - 30	SD: wh, lt gy, 90%f, 10%m, TR c qtz grns, hyal, transl, sbang/sbrnd, w srt, occ dk lithcs grns. SST: v lt gy, lt gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, sl arg mtx, calc cmnt, md fri, w/dk & grn lithcs grns incl, w/pyr on surf, p vis por. CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbbly, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. FLUO: NVOS, pin-point, bright, pale yell nat fluo, slow, wk, faint, even, pal yel'sh wh cut fluo, mlky wh res ring under UV lt, no res ring at nat fluo, P-FOS. TG: 41 C1: 3087 C2: 174 C3: 109 C4: 77 C5: 11
RIO BRAVO	6290 - 6382	105	60	TR	10	30					TR - 10	CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbbly, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. SD: wh, lt gy, 90%f, 10%m, TR c qtz grns, hyal, transl, sbang/sbrnd, w srt, occ dk lithcs grns. SST: v lt gy, lt gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, sl arg mtx, calc cmnt, md fri, w/dk & grn lithcs grns incl, w/pyr on surf, p vis por. FLUO: NVOS, pin-point, faint, pale yell nat fluo, slow/crush, wk, faint, even, pal yel'sh wh cut fluo, mlky wh res ring under UV lt, no res ring at nat fluo, P-FOS. TG: 50 C1: 3755 C2: 205 C3: 123 C4: 87 C5: 16
RIO BRAVO	6382 - 6495	81	TR	10	20	70					TR - 30	SD: wh, lt gy, 10%vf, 70%f, 20%m, tr C qtz grns, hyal, transl, sbang/sbrnd, w srt, occ dk lithcs grns. SST: v lt gy, lt gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, sl arg mtx, calc cmnt, md fri, w/dk & grn lithcs grns incl, w/pyr on surf, p vis por. SLTST: md dk gy, md gy, earthy surf, blk/sbbly, irr, md frm/frm, mic mic, mic carb, grad to vf sst, sl calc i/p. FLUO: NVOS, pin-point, faint, pale yell nat fluo, slow, wk, faint, even, pal yel'sh wh cut fluo, mlky wh res ring under UV lt, no res ring at nat fluo, P-FOS. TG: 89 C1: 6433 C2: 413 C3: 267 C4: 178 C5: 22

CUMULATED 2 733 482 US\$

RIO BRAVO	7443 - 7690	112	60	10	20	10					NF	CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbblky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. SLTST: md dk gy, md gy, earthy surf, blk/sbblky, irr, md frm/frm, mic mic, mic carb, grad to vf sst, sl calc i/p. SD: wh, lt gy, 90%f, 10%m, TR c qtz grns, hyal, trans, sbrnd/sbang, w srt, occ dk lithcs grns. SST: v lt gy, lt gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, sl arg mtz, calc cmnt, md fri, w/dk & grn lithcs grns incl, w/pyr on surf, p vis por. TG: 16 C1: 1320 C2: 54 C3: 22 C4: 10 C5: 6
RIO BRAVO	7690 - 7770	149	60	10	TR	30					NF	CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbblky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. SD: wh, lt gy, 90%f, 10%m, TR c qtz grns, hyal, trans, sbrnd/sbang, w srt, occ dk lithcs grns. SLTST: md dk gy, md gy, earthy surf, blk/sbblky, irr, md frm/frm, mic mic, mic carb, grad to vf sst, sl calc i/p. SST: v lt gy, lt gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, sl arg mtz, calc cmnt, md fri, w/dk & grn lithcs grns incl, w/pyr on surf, p vis por. TG: 17 C1: 1463 C2: 54 C3: 21 C4: 6 C5: 5
RIO BRAVO	7770 - 7940	142	20		30	50					10 - 30	SD: wh, lt gy, 80%f, 80%m, TR c qtz grns, hyal, trans, sbrnd/sbang, w srt, occ dk lithcs grns. SST: v lt gy, lt gy, lt brn'sh gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, sl arg mtz, v calc cmnt, md fri/md consl, w/dk & grn lithcs grns incl, w/pyr on surf, p-f vis por. CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbblky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. FLUO: NVOS, pin-point, bright, yell'sh wt nat fluo, slow, wk, faint, even, lt yell'sh wh cut fluo, milky wh res ring under UV lt, no res ring at nat fluo, P-FOS. TG: 43 C1: 3612 C2: 176 C3: 88 C4: 11 C5: 7
RIO BRAVO	7940 - 8040	147	60		30	10					TR - 10	SD: wh, lt gy, 80%f, 80%m, TR c qtz grns, hyal, trans, sbrnd/sbang, w srt, occ dk lithcs grns. SST: v lt gy, lt gy, lt brn'sh gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, sl arg mtz, v calc cmnt, md fri/md consl, w/dk & grn lithcs grns incl, w/pyr on surf, p-f vis por. CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbblky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. FLUO: NVOS, pin-point, bright, yell'sh wt nat fluo, slow, wk, faint, even, lt yell'sh wh cut fluo, milky wh res ring under UV lt, no res ring at nat fluo, P-FOS. TG: 22 C1: 1882 C2: 79 C3: 40 C4: 14 C5: 5

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)
7706.88	54.04	229.93	4192.74	-4142.74	5919.90	-3683.41	-4634.42
7800.94	52.91	229.75	4248.72	-4198.72	5995.45	-3732.15	-4692.18
7902.64	52.36	230.70	4310.44	-4260.44	6076.26	-3783.87	-4754.30

Mud information:

Type:	Clay Seal
Mud Weight (ppg):	11.2
Viscosity (sec):	45
Filtrate (ml):	5.8

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
Helico					
Lobitos	757.0	752.00	-702.00	-17.04	-63.25
Terebratula	2855.0	2064.00	-2014.00	-930.49	-1263.90
Chacra	3120.0	2173.16	-2123.16	-1088.26	-1446.72
Rio Bravo	5816.0	3293.49	-3243.49	-2624.89	-3357.89

Remarks

So far we have drilled 2224' MD (1077' Vss) of mainly sand and sandstone interbedded with some claystone within RIO BRAVO fm; cuttings show natural fluorescence.

Gas average decreased from 90 to 35 units (C1-C5).

Between 7780' - 7940' MD we have mainly Sand and Sandstone very fine to fine grains, sl consl, w/some dk lithcs and grn grains incl, p-f vis por, w/calc material incl; natural fluorescence (NVOS, Tr -30% pin point, pale, yell'sh wh nat fluo, slw-crsh, wk, fnt, even, lt yell'sh wh cut fluo, milky wh res ring under U. V. lt, no res ring at nat lt. POS). Gamma Ray readings average is 100 API. Gas average 43 units (C1-C5).

At 7186' MD we had 7489 units of Gas Trip (C1-C5).

The interval 7425' - 7443' MD has mainly sandstone & sand, with natural fluorescence until up 30%; res ring under U.V. light. The interval 7385' - 7395' MD showed mainly sand & sandstone too, but it didn't show natural fluorescence.

Last survey at 7903' MD was incl 52.36°, az 230.70°, TVDss -4260', distance about to plan is 7.5'.

ROP average rotating mode is 145.

Well Cost:

AFE	4 816 710	US\$
DAILY	91 052	US\$



SAVIA
PERÚ

REPORT N° 21

LOBITOS FIELD

LO6-30D GEOLOGICAL DAILY REPORT

Geologists:	D. Paz	OPERATIONS DATE :	26-Mar-14
Mud Loggers:	O. Ojeda/H. Monasterio	REPORT DATE :	27-Mar-14
Rig Contractor:	RIG 40	SPUD DATE:	2-Mar-14
Depth @ 00h00 (ft):	6812	PROGRESS 00h00-24h00 (ft):	943
Depth @ 24h00 (ft):	7755	CSG (ft):	9 5/8" 5673
Depth @ 06h00 (ft):	8040	DRILLING DAYS:	25

Operations summary:

Drilled rotating from 6812' to 7755'MD. Performed wiper trip at 7186'MD.

Present operations:

Circulating at 8040'MD to perform wiper trip from bottom to 7186'MD. Current depth 8040'MD (-4320'TVDss).

Prognosed operations:

Perform wiper trip. Drill ahead to find 150'ft of claystone within Rio Bravo fm.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Slst %	Sst %	Sd %	Lmst %				Fluor %	LITHOLOGICAL DESCRIPTION
RIO BRAVO	7186 - 7383	84	40	30	20	10					NF	CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbbkly, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. SLTST: md dk gy, md gy, earthy surf, blk/sbbkly, irr, md frm/frm, mic mic, mic carb, grad to vf sst, sl calc i/p. SST: v lt brn'sh gy, some lt gy/v lt gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, v calcareous mtz, some arg mtz, calc cmnt, md consl/consl, w/some dk lithcs grns incl, vp vis por. SD: wh, lt gy, 10%VF, 70%f, 20% m, tr C qtz grns, hyal, trans, sbrnd/sbang, w srt, occ dk lithcs grns. TG: 32 C1: 2173 C2: 115 C3: 103 C4: 91 C5: 27
RIO BRAVO	7383 - 7395	57	20	10	40	30					NF	SST: v lt gy/lt gy, some v lt brn'sh gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, v calcareous mtz, some arg mtz, calc cmnt, md consl/consl, w/some dk lithcs grns incl, vp vis por. SLTST: md dk gy, md gy, earthy surf, blk/sbbkly, irr, md frm/frm, mic mic, mic carb, grad to vf sst, sl calc i/p. CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbbkly, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. SD: wh, lt gy, 10%VF, 70%f, 20% m, tr C qtz grns, hyal, trans, sbrnd/sbang, w srt, occ dk lithcs grns. TG: 12 C1: 1016 C2: 39 C3: 17 C4: 9 C5: 8
RIO BRAVO	7395 - 7423	100	50	20	20	10					NF	CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbbkly, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. SLTST: md dk gy, md gy, earthy surf, blk/sbbkly, irr, md frm/frm, mic mic, mic carb, grad to vf sst, sl calc i/p. SST: v lt brn'sh gy, some lt gy/v lt gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, v calcareous mtz, some arg mtz, calc cmnt, md consl/consl, w/some dk lithcs grns incl, vp vis por. SD: wh, lt gy, 10%VF, 70%f, 20% m, tr C qtz grns, hyal, trans, sbrnd/sbang, w srt, occ dk lithcs grns. TG: 13 C1: 1068 C2: 44 C3: 19 C4: 12 C5: 11
RIO BRAVO	7423 - 7443	79	10		50	40					5 - 30	SD: wh, lt gy, 90%f, 10% m, TR c qtz grns, hyal, trans, sbrnd/sbang, w srt, occ dk lithcs grns. SST: v lt gy, lt gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, sl arg mtz, calc cmnt, md fri, w/dk & grn lithcs grns incl, w/pyr on surf, p vis por. CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, blk/sbbkly, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. FLUO: NVOS, pin-point, bright, yell'sh wt nat fluo, slow, wk, faint, even, lt yel'sh wh cut fluo, milky wh res ring under UV lt, no res ring at nat fluo, P-FOS. TG: 60 C1: 4579 C2: 282 C3: 161 C4: 64 C5: 22



SAVIA
PERU

REPORT N° 22

LOBITOS FIELD

LO6-30D GEOLOGICAL DAILY REPORT

Geologists: D. Paz
Mud Loggers: O. Ojeda/H. Monasterio
Rig Contractor: RIG 40
Depth @ 00h00 (ft): 7755
Depth @ 24h00 (ft): 8198
Depth @ 06h00 (ft): 8198

OPERATIONS DATE : 27-Mar-14
REPORT DATE : 28-Mar-14
SPUD DATE: 2-Mar-14
PROGRESS 00h00-24h00 (ft): 443
CSG (ft): 9 5/8" 5673
DRILLING DAYS: 26

Operations summary:

Drilled rotating from 7755' to 8198'MD. (Total Depth). Circulated on bottom. POOH directional BHA at 4100'MD.

Present operations:

POOH 8 1/2" slick BHA at 6000'MD.

Prognosed operations:

POOH 8 1/2" slick BHA at surface. RIH Weatherford logging tool with drill pipe to 8198'MD.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Sist %	Sst %	Sd %	Lmst %				Fluor %	LITHOLOGICAL DESCRIPTION
RIO BRAVO	8040 - 8110	162	30	20	30	20						TR SD: wh, lt gy, 90% f, 10% m, TR c qtz grns, hyal, transl, sbrnd/sbang, w srt, occ dk lithcs grns. SST: v lt gy, lt gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, sl arg mtz, calc cmnt, md fri, w/dk & grn lithcs grns incl, w/pyr on surf, p vis por. CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, biky/sbbiky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. FLUO: NVOS, pin-point, bright, yell'sh wt nat fluo, slow, wk, faint, even, lt yell'sh wh cut fluo, milky wh res ring under UV lt, no res ring at nat fluo, P-FOS. TG: 29 C1: 2400 C2: 113 C3: 53 C4: 19 C5: 6
RIO BRAVO	8110 - 8138	150	20	10	40	30						TR SD: wh, lt gy, 80% f, 80% m, TR c qtz grns, hyal, transl, sbrnd/sbang, w srt, occ dk lithcs grns. SST: v lt gy, lt gy, lt brn'sh gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, sl arg mtz, v calc cmnt, md fri/md consl, w/dk & grn lithcs grns incl, w/pyr on surf, p-f vis por. CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, biky/sbbiky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. FLUO: NVOS, pin-point, bright, yell'sh wt nat fluo, slow, wk, faint, even, lt yell'sh wh cut fluo, milky wh res ring under UV lt, no res ring at nat fluo, P-FOS. TG: 154 C1: 12840 C2: 649 C3: 33 C4: 43 C5: 9
RIO BRAVO	8138 - 8198	88	40	20	30	10						NF CLYST: md dk gy, dk gy, olv blk, earthy/rough surf, biky/sbbiky, occ sbply, occ irr, md frm/frm, mic mic, mic carb, sl calc. SD: wh, lt gy, 90% f, 10% m, TR c qtz grns, hyal, transl, sbrnd/sbang, w srt, occ dk lithcs grns. SLTST: md dk gy, md gy, earthy surf, biky/sbbiky, irr, md frm/frm, mic mic, mic carb, grad to vf sst, sl calc i/p. SST: v lt gy, lt gy, vf qtz grns, hyal, transl, sbang/sbrnd, w srt, sl arg mtz, calc cmnt, md fri, w/dk & grn lithcs grns incl, w/pyr on surf, p vis por. TG: 23 C1: 1816 C2: 85 C3: 51 C4: 26 C5: 8

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)
8088.36	52.14	230.08	4424.76	-4374.76	6222.60	-3876.34	-4867.75
8150.80	52.26	230.04	4463.03	-4413.03	6271.92	-3908.01	-4905.57
8198.00	52.30	230.10	4491.91	-4441.91	6309.24	-3931.98	-4934.20

Mud information:

Type: Clay Seal
Mud Weight (ppg): 11.2
Viscosity (sec): 45
Filtrate (ml): 5.8

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
Helico					
Lobitos	757.0	752.00	-702.00	-17.04	-63.25
Terebratula	2855.0	2064.00	-2014.00	-930.49	-1263.90
Chacra	3120.0	2173.16	-2123.16	-1088.26	-1446.72
Rio Bravo	5816.0	3293.49	-3243.49	-2624.89	-3357.89
TD	8198.0	4491.91	-4441.91	-3931.98	-4934.20

Remarks

Development department management decided to finish the well at 8198'MD (-4141.91'TDVs). So far we have drilled 2382'MD (1198'ft Vss) of mainly sand and sandstone interbedded with some claystone within RIO BRAVO fm; cuttings show natural fluorescence. Between 8040' - 8198'MD we have Sand, Sandstone, and claystone interbedded with traces of natural fluorescence. Gamma Ray readings between 130 - 75 API. Gas average 30 units (C1-C5). The interval 8110' - 8140' had Gas average 154 units (C1-C5). Last survey at 8150'MD was incl 52.26°, az 230.10°, TVDss -4412', distance about to plan is 9.1'ft. ROP average rotating mode is 130.

Well Cost:

AFE 4 816 710 US\$
DAILY 86 218 US\$
CUMULATED 2 819 700 US\$



SAVIA
PERÚ

REPORT N° 23

LOBITOS FIELD

LO6-30D GEOLOGICAL DAILY REPORT

Geologists: D. Paz
Mud Loggers: O. Ojeda/H. Monasterio
Rig Contractor: RIG 40
Depth @ 00h00 (ft): 8198
Depth @ 24h00 (ft): 8198
Depth @ 06h00 (ft): 8198

OPERATIONS DATE : 28-Mar-14
REPORT DATE : 29-Mar-14
SPUD DATE: 2-Mar-14
PROGRESS 00h00-24h00 (ft): 0
CSG (ft): 9 5/8" 5673
DRILLING DAYS: 27

Operations summary:

Continued RIH with 8 1/2" slick BHA from 4100' to 8198'MD. Circulated and condition mud to logging. POOH 8 1/2" slick BHA from 8198'MD to surface. M/U Weatherford's Shuttle compact tool (logging tool) and RIH at 6695'MD with drill pipes without problems.

Present operations:

POOH drill pipes with Weatherford's logging tools at 5100'MD.

Prognosed operations:

POOH at surface drill pipes & L/D logging tools. Run 5 1/2" csg.

Lithology summary:

Formation name	Interval (ft)	ROP ft/hr	Clyst %	Sist %	Sst %	Sd %	Lmst %				Fluor %	LITHOLOGICAL DESCRIPTION
RIO BRAVO												

Surveys:

Depth (ft)	Incl (deg)	Azimuth (deg)	TVD (ft)	TVDSS (ft)	HD (ft)	NS (ft)	EW (ft)
8088.36	52.14	230.08	4424.76	-4374.76	6222.60	-3876.34	-4867.75
8150.80	52.26	230.04	4463.03	-4413.03	6271.92	-3908.01	-4905.57
8198.00	52.30	230.10	4491.91	-4441.91	6309.24	-3931.98	-4934.20

Mud information:

Type: Clay Seal
Mud Weight (ppg): 11.2
Viscosity (sec): 45
Filtrate (ml): 5.8

Provisional Formation Tops:

Formation	MD(ft)	TVD(ft)	TVDss(ft)	North(ft)	East(ft)
Helico			FROM SURFACE		
Lobitos	757.0	752.00	-702.00	-17.04	-63.25
Terebratula	2855.0	2064.00	-2014.00	-930.49	-1263.90
Chacra	3120.0	2173.16	-2123.16	-1088.26	-1446.72
Rio Bravo	5816.0	3293.49	-3243.49	-2624.89	-3357.89
TD	8198.0	4491.91	-4441.91	-3931.98	-4934.20

Remarks

Weatherford personnel arrived to platform on March 28th, at 09:00hrs.

Started to run Drill pipes and Shuttle compact at 14:00hrs.

Weatherford engineer dropped down shuttle dart today at 03:30hrs, without problems. Then Pepesa crew started RIH drill pipes.

Well Cost:

AFE 4 816 710 US\$
DAILY 50 372 US\$
CUMULATED 2 870 072 US\$