

LOG INPUT SHEET

Well Name : L016-12 Date : 21. MAR. 90
 Area Name : LOBITOS
 Depth Logged : 7704 ft Mud Weight : 12 lb/gal
 Max Rec Temperature : 128 °F Surface Temperature : 74 °F
 Rm : 0.07 ohm-m measured at 74 °F
 Rmf : 0.015 ohm-m measured at 76 °F
 Rmc : 0.15 ohm-m measured at 76 °F

File Name : L016-12M Number of Readings : 307

	1	2	3	4	5	6	7	8	9
	Δt_s	ϕ_n	Rho1	GR	Rt	Rxo	Rm	ϕ_d	ϕ_s
Data Input Format :	<u>0</u>	<u>4</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>0</u>

Formation Name . . . : MOGOLLON
 Gross Interval . . . : Top 5150 , Bottom 5880 ft
 Hole Diameter . . . : 10 inches HC Density : 0.835 gr/cm3
 Rw : 0.232 ohm-m (L010-4) measured at 116 °F
 m, Compaction Fac . . : 1.68 n, Saturation Exp . . : 2
 Archie Constant . . . : 1 Rsh, Shale Resis . . : 6 ohm-m
 Gamma Ray : Max 88 , Min 26 Api Units
 Neutron Shale Por* . . : 27 % Neutron Minimum . . . : 8 %
 Neutron Shift : — % Maximum Porosity . . : 15 %
 Shale Density : 2.536 g/cm3 Fluid Density : 1.1 gr/cm3
 Log Matrix Density : 2.68 g/cm3 Matrix Density . . . : 2.68 gr/cm3
 Shale Transit Time : — msec/ft
 Matrix Transit Time : — msec/ft Fluid Transit Time : — msec/ft

Cut off values, % : Porosity 0 , Water Sat 50 , Shaliness 50 %
 Cross Plot : Shale Type 1 Shale cut-off 50 % Scales (.1-10) or (1-100)
 Resistivity Logs . . : Rdeep LLD Rxo — Rm —

* Dato obligatorio. Ingresar aún si no tiene ϕ_n . Usar datos de otro pozo ó del área.

***** COMPACT FORM *****

Shale Type = 1

Rw = .239 ohm-m (Rho)ma-f = 2.68

(Rho)ma-L = 2.68

A = 1

M = 1.68

N = 2

Rwsh = .086 ohm-m (Rho)sh = 2.5536

Rsh = 6

(Por)n-sh = 27 %

GRmax = 88

GRmin = 26

DEPTH	GR	PORi	PORd	PORe	Rd	Rt	Ty	Vclay	Vsh 0	Vsh 1	Vsh 3	SW 7	SW 9	SW 10	PERM
5160	83	7.5	2.3	6.4	7.9	7.7	0	64.5	82.0	93.2	96.4	74.7	58.5	89.9	0.000
5162	80	6.7	2.8	8.9	6.7	6.7	0	47.9	69.8	87.4	89.3	80.2	72.4	112.3	0.000
5164	78	6.9	3.5	10.3	7.8	7.7	0	41.5	64.0	84.2	92.0	72.9	64.0	100.7	0.000
5166	78	7.5	4.0	10.2	8.4	8.3	0	42.9	65.4	85.0	95.3	68.1	56.6	89.5	0.000
5168	78	6.0	2.7	10.1	9.4	9.2	0	40.9	63.4	83.9	87.3	70.4	61.2	99.0	0.000
5170	72	7.0	4.7	12.2	10.2	9.9	0	28.4	50.0	75.0	90.3	63.5	55.7	87.4	0.000
5172	73	7.5	5.1	12.8	8.6	8.5	0	29.5	51.3	75.9	96.2	66.9	59.7	92.4	0.000
5174	85	5.9	0.0	3.9	7.7	7.6	0	77.7	88.8	96.3	88.8	100.0	100.0	100.0	0.000
5176	82	6.4	1.8	7.5	7.5	7.4	0	57.1	76.9	90.9	90.3	79.8	70.4	105.8	0.000
5178	70	6.7	4.7	12.4	7.3	7.3	0	24.5	44.8	70.9	86.6	76.4	75.2	115.9	0.000
5180	76	7.1	4.2	10.6	6.8	6.7	0	35.8	58.3	80.7	87.9	76.5	70.6	110.6	0.000
5182	55	9.0	8.1	13.8	7.9	7.8	0	10.7	20.8	47.5	89.1	74.4	75.8	99.2	0.000
5184	59	11.3	10.2	15.9	5.9	5.8	0	13.6	26.5	54.3	108.1	73.3	72.6	95.9	0.001
5186	54	10.0	9.2	16.3	5.4	5.4	0	9.9	19.2	45.3	103.0	85.9	90.5	115.6	0.000
5188	79	9.5	5.8	10.3	5.4	5.4	0	46.1	68.2	86.5	105.9	76.3	61.1	100.8	0.000
5190	67	5.0	3.2	12.5	7.5	7.4	0	21.2	40.4	67.0	79.5	85.7	90.8	146.5	0.000
5192	46	5.8	5.3	12.0	14.5	14.0	0	5.9	11.6	32.4	68.1	80.3	79.7	108.0	0.000
5194	35	6.0	5.8	9.8	16.5	15.9	0	2.4	4.7	15.7	57.4	95.9	95.4	112.8	0.000
5196	38	6.9	6.6	9.3	26.0	24.6	0	3.4	6.6	20.9	58.2	65.1	59.8	73.9	0.003
5198	38	8.9	8.6	13.0	22.0	20.9	0	3.1	6.1	19.7	80.1	61.5	58.1	67.1	0.017
5200	27	7.7	7.6	11.7	30.9	29.0	0	0.4	0.7	2.9	69.5	75.0	73.7	75.5	0.013
5202	69	5.6	3.7	10.1	24.0	22.8	0	23.5	43.6	69.9	69.6	46.3	32.6	57.0	0.000
5204	71	6.1	3.9	11.9	12.1	11.8	0	27.3	48.6	73.9	84.7	61.6	52.9	86.5	0.000
5206	72	6.2	3.9	11.3	11.5	11.2	0	28.4	49.9	74.9	82.5	62.9	54.4	88.3	0.000
5208	52	7.6	6.8	11.9	16.2	15.5	0	9.1	17.8	43.2	74.6	59.5	55.1	75.1	0.001
5210	27	4.5	4.4	7.4	62.1	56.8	0	0.3	0.6	2.2	41.9	84.0	80.6	84.2	0.000
5212	29	6.9	6.8	12.5	78.7	71.3	0	0.7	1.3	5.1	70.6	50.0	45.8	49.5	0.032
5214	68	5.1	3.2	11.8	18.1	17.3	0	22.9	42.7	69.1	77.1	55.2	43.2	76.2	0.000
5216	69	6.1	4.2	12.5	8.8	8.6	0	23.3	43.2	69.6	84.0	72.9	70.5	110.9	0.000
5218	68	6.4	4.5	11.3	9.2	9.0	0	22.9	42.7	69.1	78.1	70.3	66.9	103.9	0.000
5220	65	6.8	5.3	11.1	8.9	8.7	0	18.6	36.1	63.2	74.6	71.5	70.0	105.4	0.000
5222	60	6.9	5.7	11.6	11.0	10.7	0	14.4	28.0	55.9	74.9	67.2	64.8	94.7	0.000
5224	57	7.8	6.8	12.2	14.0	13.5	0	11.8	23.0	50.2	78.7	59.3	54.9	76.5	0.000
5226	54	6.6	5.7	11.5	18.2	17.4	0	10.2	19.8	46.1	70.6	58.4	52.1	75.6	0.000
5228	64	5.9	4.4	11.9	21.3	20.3	0	18.0	34.9	62.3	76.0	50.0	38.8	64.4	0.000
5230	80	5.3	1.2	8.5	10.7	10.4	0	50.6	72.0	88.5	86.0	71.6	59.4	95.6	0.000
5232	83	6.0	0.7	5.7	8.6	8.5	0	65.5	82.6	93.4	85.8	80.6	70.6	99.9	0.000
5234	75	4.0	1.1	10.5	9.1	8.9	0	35.5	58.0	80.5	78.0	82.6	78.4	141.0	0.000
5236	72	2.4	0.1	9.8	10.9	10.6	0	28.5	50.0	75.0	62.4	88.2	75.0	187.6	0.000
5238	49	2.0	1.3	8.4	36.3	33.9	0	7.6	14.9	38.5	41.3	70.8	44.4	127.0	0.000
5240	46	8.5	8.0	12.6	43.5	40.3	0	6.0	11.8	32.7	78.9	38.8	30.3	39.5	0.042
5242	66	5.9	4.3	12.1	21.1	20.1	0	19.8	38.2	65.0	78.6	49.4	37.8	63.0	0.000
5244	81	5.6	1.2	7.2	12.9	12.5	0	53.9	74.6	89.8	80.5	64.8	49.1	78.9	0.000
5246	76	5.4	2.4	9.9	11.5	11.2	0	37.0	59.5	81.5	80.0	66.2	55.8	94.2	0.000
5248	77	4.3	1.1	10.0	10.6	10.4	0	39.3	61.9	82.9	79.7	75.1	65.5	117.2	0.000
5250	79	4.5	0.7	8.5	10.8	10.5	0	46.8	68.8	86.9	78.2	75.2	63.2	108.6	0.000
5252	79	5.2	1.5	8.5	11.5	11.2	0	46.1	68.2	86.5	79.5	68.3	55.9	93.0	0.000
5254	83	5.5	0.5	6.1	10.9	10.7	0	61.6	80.1	92.3	81.4	73.6	59.0	89.4	0.000
5256	84	4.9	0.0	4.9	11.3	11.0	0	70.1	81.6	94.6	81.6	100.0	100.0	100.0	0.000
5258	85	4.7	0.0	3.4	10.6	10.4	0	76.7	74.3	96.1	74.3	100.0	100.0	100.0	0.000

***** COMPACT FORM *****

Shale Type = 1

Rw = .239 ohm-m (Rho)ma-f = 2.68

(Rho)ma-L = 2.68

A = 1

M = 1.68

N = 2

Rwsh = .086 ohm-m (Rho)sh = 2.5536

Rsh = 6

(Por)n-sh = 27 %

GRmax = 88

GRmin = 26

DEPTH	GR	PORi	PORd	PORe	Rd	Rt Ty	Vclay	Vsh 0	Vsh 1	Vsh 3	SW 7	SW 9	SW 10	PERM
5260	73	6.7	4.2	10.0	14.5	14.0 0	30.5	52.4	76.8	77.7	54.4	42.9	69.5	0.000
5262	54	7.5	6.6	12.5	22.9	21.7 0	10.4	20.2	46.6	78.2	49.1	41.2	58.2	0.002
5264	54	8.2	7.3	12.9	21.7	20.6 0	10.3	20.1	46.5	82.2	48.4	41.2	56.4	0.004
5266	60	6.0	4.8	12.2	17.3	16.6 0	14.0	27.2	55.0	75.1	57.8	50.1	78.3	0.000
5268	64	4.9	3.4	11.3	18.8	17.9 0	17.6	34.2	61.7	69.6	57.2	46.2	81.7	0.000
5270	74	6.3	3.7	10.8	15.3	14.7 0	31.6	53.7	77.7	82.7	54.4	42.2	69.2	0.000
5272	83	6.1	1.0	6.2	9.9	9.7 0	63.4	81.3	92.8	87.1	73.6	60.3	88.7	0.000
5274	77	6.8	3.6	10.9	8.9	8.7 0	39.2	61.8	82.9	93.1	68.7	59.1	93.9	0.000
5276	88	5.6	0.0	0.0	8.8	8.6 0	100.0	87.4	100.0	87.4	100.0	100.0	100.0	0.000
5278	83	4.0	0.0	5.8	8.6	8.5 0	65.2	79.8	93.4	79.8	100.0	100.0	100.0	0.000
5280	74	5.4	2.7	10.7	8.9	8.7 0	32.7	55.0	78.5	80.5	74.9	70.3	115.1	0.000
5282	79	6.3	2.7	9.2	10.1	9.9 0	44.7	67.0	85.9	86.7	67.1	55.6	89.4	0.000
5284	79	8.2	4.6	8.0	7.5	7.4 0	44.3	57.8	85.7	82.0	69.5	56.8	90.4	0.000
5286	60	5.9	4.7	9.6	14.9	14.3 0	14.2	27.6	55.5	61.6	62.2	56.3	87.6	0.000
5288	46	8.4	7.9	11.8	23.6	22.3 0	6.0	11.6	32.5	74.8	52.5	46.9	59.3	0.010
5290	44	9.7	9.2	14.6	9.3	9.2 0	5.4	10.6	30.4	90.7	77.6	79.2	94.1	0.003
5292	40	10.7	10.3	15.3	15.9	15.3 0	3.9	7.6	23.6	95.6	61.1	58.9	67.2	0.033
5294	46	12.1	11.6	17.0	10.8	10.5 0	6.0	11.7	32.6	109.0	62.2	60.9	71.5	0.031
5296	46	11.1	10.6	15.8	8.6	8.5 0	6.0	11.7	32.7	100.6	72.7	73.3	87.0	0.008
5298	39	9.7	9.4	14.4	11.8	11.5 0	3.7	7.1	22.4	88.6	75.7	75.8	86.9	0.007
5300	43	9.5	9.1	14.0	12.3	11.9 0	4.8	9.3	27.6	87.2	70.9	70.5	83.4	0.006
5302	46	11.1	10.6	14.8	13.2	12.8 0	6.2	12.0	33.2	96.4	58.9	56.7	67.4	0.026
5304	46	10.2	9.7	14.9	12.5	12.1 0	6.0	11.7	32.5	94.1	64.1	62.7	75.1	0.011
5306	55	9.5	8.6	14.6	12.6	12.2 0	10.5	20.4	46.9	93.9	58.3	54.8	71.2	0.004
5308	49	9.8	9.2	14.1	11.3	11.0 0	7.3	14.2	37.3	90.0	65.5	64.5	79.6	0.005
5310	47	10.6	10.0	15.1	11.1	10.8 0	6.6	12.8	34.8	96.3	64.9	63.8	76.6	0.010
5312	50	9.7	9.0	14.6	11.7	11.4 0	8.1	15.8	40.0	92.9	63.2	61.5	77.0	0.005
5314	51	8.2	7.5	14.1	13.1	12.6 0	8.2	16.1	40.5	86.0	65.1	63.1	82.1	0.001
5316	56	7.7	6.7	13.9	10.1	9.8 0	11.3	22.1	49.1	86.3	70.6	70.3	95.6	0.000
5318	63	6.9	5.5	13.0	9.5	9.3 0	17.2	33.5	61.0	84.0	69.8	67.9	101.2	0.000
5320	63	6.2	4.8	11.1	10.7	10.4 0	16.9	32.9	60.5	72.0	69.0	66.3	101.5	0.000
5322	56	7.4	6.4	13.4	16.7	16.0 0	11.6	22.5	49.7	83.1	56.1	50.2	71.4	0.000
5324	60	10.0	8.8	16.2	10.4	10.2 0	14.4	28.0	55.9	106.3	58.4	54.2	73.5	0.003
5326	67	7.9	6.1	14.4	7.5	7.4 0	21.7	41.0	67.6	98.3	71.9	69.3	102.5	0.000
5328	75	6.2	3.4	11.2	7.9	7.7 0	34.6	57.0	79.9	88.0	75.1	70.1	111.6	0.000
5330	70	5.6	3.5	11.7	9.6	9.4 0	25.6	46.4	72.2	80.3	71.5	67.3	109.6	0.000
5332	61	4.3	3.0	11.2	9.8	9.6 0	15.0	29.2	57.1	65.5	84.5	87.4	147.0	0.000
5334	43	7.9	7.5	12.4	19.2	18.3 0	4.9	9.5	27.9	75.4	63.3	59.7	74.0	0.004
5336	46	9.5	9.0	13.9	13.7	13.3 0	6.0	11.7	32.6	87.5	63.6	61.8	75.1	0.007
5338	63	10.1	8.7	12.9	13.3	12.9 0	16.9	32.9	60.5	92.1	50.4	43.6	60.0	0.005
5340	45	10.2	9.7	14.5	11.3	11.0 0	5.9	11.5	32.2	91.9	67.5	66.8	80.1	0.008
5342	41	10.1	9.7	13.7	11.4	11.1 0	4.3	8.4	25.5	87.2	72.6	72.6	84.0	0.008
5344	36	11.7	11.5	14.2	13.2	12.8 0	2.4	4.8	16.1	93.0	68.3	67.4	73.4	0.050
5346	42	12.8	12.4	15.9	11.8	11.4 0	4.4	8.6	26.0	104.7	61.3	59.9	67.8	0.070
5348	62	10.1	8.8	14.7	8.2	8.0 0	16.0	31.1	59.0	100.6	64.2	60.8	83.3	0.001
5350	71	7.5	5.3	12.5	9.3	9.1 0	27.3	48.5	73.8	91.8	64.8	57.8	89.1	0.000
5352	73	5.0	2.5	10.7	11.9	11.6 0	30.9	52.9	77.1	77.7	66.5	57.3	99.8	0.000
5354	75	6.2	3.3	9.9	12.3	11.9 0	35.3	57.8	80.4	80.3	60.9	49.6	81.4	0.000
5356	72	5.7	3.3	10.8	10.8	10.5 0	29.3	51.0	75.7	78.6	66.8	59.2	97.6	0.000
5358	64	5.7	4.2	12.4	12.2	11.8 0	17.8	34.7	62.1	77.9	66.4	61.6	98.2	0.000

***** COMPACT FORM *****

Shale Type = 1

Rw = .239 ohm-m (Rho)ma-f = 2.68
Rwsh = .086 ohm-m (Rho)sh = 2.5536(Rho)ma-L = 2.68 A = 1
Rsh = 6 (Por)n-sh = 27 %M = 1.68
GRmax = 88N = 2
GRmin = 26

DEPTH	GR	PORi	PORd	PORe	Rd	Rt Ty	Vclay	Vsh 0	Vsh 1	Vsh 3	SW 7	SW 9	SW 10	PERM
5360	73	6.4	4.0	10.8	9.8	9.6 0	29.4	51.2	75.9	80.6	67.0	60.0	95.8	0.000
5362	70	8.0	5.9	12.2	11.1	10.8 0	25.5	46.3	72.1	90.2	58.3	50.0	75.8	0.000
5364	68	8.1	6.3	12.5	10.5	10.3 0	22.4	42.0	68.5	88.9	60.0	53.2	79.4	0.000
5366	61	9.7	8.5	14.6	9.5	9.3 0	14.9	29.1	57.0	98.0	61.4	57.7	79.1	0.001
5368	58	9.5	8.4	15.7	9.7	9.5 0	13.0	25.2	52.9	101.1	63.2	60.6	81.0	0.001
5370	73	10.8	8.4	13.8	7.6	7.5 0	29.9	51.7	76.3	112.1	60.4	49.8	75.8	0.000
5372	76	8.9	6.0	12.1	7.0	6.9 0	35.9	58.4	80.8	103.1	68.6	58.1	91.0	0.000
5374	77	8.6	5.3	11.1	6.7	6.6 0	40.5	63.1	83.7	101.0	71.3	59.7	94.6	0.000
5376	79	9.3	5.7	10.5	6.8	6.7 0	44.6	66.9	85.8	104.5	68.6	54.0	87.3	0.000
5378	78	9.7	6.3	10.5	7.3	7.2 0	41.7	64.2	84.3	102.0	65.2	51.0	81.5	0.000
5380	68	9.4	7.6	12.9	6.8	6.7 0	21.9	41.3	67.9	94.4	69.7	65.4	95.3	0.000
5382	57	9.0	8.0	14.4	8.7	8.5 0	12.0	23.4	50.8	92.7	69.4	68.9	92.0	0.000
5384	61	7.4	6.1	14.0	10.2	10.0 0	15.4	29.9	57.8	88.6	67.0	64.6	93.2	0.000
5386	64	7.4	5.9	14.9	12.8	12.4 0	18.0	34.9	62.3	96.0	58.5	52.2	77.6	0.000
5388	75	10.5	7.6	12.7	8.5	8.3 0	35.1	57.6	80.3	110.7	58.2	45.6	70.4	0.000
5390	72	11.9	9.6	14.2	6.4	6.4 0	28.5	50.0	75.0	115.8	63.0	52.6	79.2	0.001
5392	68	10.1	8.3	15.1	6.3	6.2 0	22.4	42.0	68.5	108.8	69.9	64.8	94.2	0.000
5394	68	10.2	8.4	15.2	7.9	7.8 0	22.2	41.8	68.3	109.3	62.2	55.6	80.4	0.000
5396	73	9.6	7.2	13.5	8.7	8.5 0	29.7	51.4	76.1	106.4	60.0	50.1	76.0	0.000
5398	70	8.4	6.3	13.2	8.1	8.0 0	25.3	46.0	71.8	96.7	66.4	60.3	90.6	0.000
5400	68	7.2	5.3	12.0	8.0	7.8 0	22.9	42.7	69.1	84.1	72.0	69.3	105.0	0.000
5402	55	5.4	4.5	12.4	11.8	11.5 0	10.6	20.6	47.2	71.8	77.1	77.1	116.4	0.000
5404	64	5.8	4.3	11.6	15.8	15.2 0	18.2	35.4	62.7	74.4	57.9	49.4	80.5	0.000
5406	68	6.8	4.9	12.3	12.2	11.9 0	22.9	42.8	69.2	84.7	59.9	52.4	81.6	0.000
5408	70	5.1	3.0	10.9	11.8	11.5 0	25.2	45.9	71.8	73.9	67.2	59.9	102.2	0.000
5410	71	4.6	2.4	10.7	12.9	12.5 0	26.5	47.6	73.1	72.2	66.6	57.4	103.2	0.000
5412	75	4.7	1.9	10.6	11.9	11.5 0	34.7	57.2	80.0	80.3	68.2	57.9	102.2	0.000
5414	70	8.1	6.1	13.0	8.5	8.4 0	24.9	45.4	71.4	94.0	65.6	59.6	89.8	0.000
5416	73	8.8	6.3	12.3	7.2	7.1 0	30.5	52.4	76.8	97.7	68.3	60.2	92.4	0.000
5418	72	9.7	7.3	12.9	7.3	7.2 0	29.1	50.7	75.5	102.7	65.2	56.5	85.4	0.000
5420	63	6.8	5.4	14.9	7.7	7.6 0	17.3	33.6	61.2	93.1	77.2	78.7	116.5	0.000
5422	76	8.0	5.0	11.7	7.7	7.6 0	36.7	59.2	81.3	98.8	68.5	58.8	92.0	0.000
5424	82	7.1	2.5	7.7	7.2	7.1 0	56.9	76.8	90.8	93.6	78.0	65.9	101.3	0.000

L016-12

LOBITOS

MOGOLLON

Por Cut = 0 %

***** NET SAND COUNT *****

Shale Cut = 50 %

Sw Cut = 50 %

Rw = .239 ohm-m (Rho)ma-f = 2.68 (Rho)ma-L = 2.68 A = 1 M = 1.68 N = 2
Rwsh = .086 ohm-m (Rho)sh = 2.5536 Rsh = 6 (Por)n-sh = 27 % GRmax = 88 GRmin = 26

DEPTH	(Por)d	(Por)e	Rt	Ty	Vclay	Vshal	Ty	Perm	(Sw) 10
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5212	6.8	12.5	71.3	0	0.7	5.1	1	0.032	49.5
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5240	8.0	12.6	40.3	0	6.0	32.7	1	0.042	39.5
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AVERAGE KH= .15 md-ft

AVERAGE K= .037 md

NET PAY = 4 ft