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Date: February 2nd, 2016

GEOLOGIC PROGNOSIS

Prospect: **Marathon Road** Well Name: Igloo 19 State #7H
County: Lea **State**: New Mexico **Operator:** Caza Operating, LLC
API NO: TBA

Location:	SL:	200' FSL & 750 FWL, Sec 19, T20S, R35E	X: 756076.1	Y: 565454.6	10637' TVD
	BHL:	330 FNL & 330 FWL, Sec 19, T20S, R35E	X: 755662.4	Y: 570188.8	10545' TVD
	Landing Point:	700' FSL & 530 FWL, Sec 19, T20S, R35E	X: 755890	Y: 595945	10622' TVD

Proposed TD: 15,480' MD 10,545' TVD
Anticipated objective: 2nd Bone Spring
Approx. 77' toe up North track.

Estimated GL: 3687 KB: 3707 KOP: +/- 10,400' TVD

Objectives: Estimated Formation Tops:

Formation	TVD @ 0' Vert. Section	TVDSS
Rustler	1809	1898
Top of Salt	2017	1690
Base of Salt	3451	256
Yates	3677	30
Capitan	4105	-398
Casing Set Point	5825	-2118
Cherry Canyon	5905	-2198
Brushy Canyon	6726	-3019
Bone Spring/Glorieta	8489	-4782
1st Bone Spring Sand	9666	-5959
2nd Bone Spring Sand	10302	-6595
Horiz. Target	10637	-6930
Total Depth	10545	-6838

Install MUD Logger: Rig Up Before Drill Out@ 5825 ' MD

Typical MUD Program:

0' – 5675' MD	8.8 ppg Spud Mud + oil if needed in Red Bed. Native Brine Water. Wt. 9.8-10.1 ppg
5675' - KOP	Fresh Water/Native Mud. Wt. 8.4-9.2 ppg
10400' KOP – TD	Fresh Water w/ Lubricant (water loss NC)

Typical Casing Program:

1) Conductor:	20" @ ~180'
2) Surface Casing:	13 3/8" @ ~1900'
3) Intermed. csg:	9 5/8" @ ~5675'
4) Production Inter:	5 1/2" @ ~15480'
5) Production Liner:	

Potential Zones for DST: Yates, Brushy Canyon and 1st Bone Spring

Logging Program:

	LOG SUITE	INTERVALS
Run #1	GR-CNL	TD to Surface.

Any known drilling problems, i.e., loss circulation, sensitive formations, salts, over pressured zones.
Note possible lost circulation in Capitan Reef.

Oil Conservation Division
Case No. 15
Exhibit No. 15