

**GENEERAL CONVENTIONS**

Populated Centers	---
Passable road during dry season	====
Unpaved road, two or more ways	=====
Passable road during dry season in 4x4 vehicles and cart	-----
Bridle path, trail	-----
House, school	—
Contour line index	—
Contour line intermediate	—
Intermittent stream	~
Floodlands	~
Water hole	~
Pipeline	—
Projected wells P-### (PALAGUA), C-### (CAIPAL)	WELL


**COORDINATES DEVELOPMENT WELLS**

NAME	EAST	NORTH	NAME	EAST	NORTH
C-8a	953,890.33	1,169,778.18	P-106	952,528.40	1,163,427.90
C-8b	953,883.70	1,169,766.30	P-123	950,691.00	1,166,735.80
C-9a	954,093.00	1,170,095.00	P-133	952,485.29	1,165,723.76
C-9b	953,827.70	1,170,156.90	P-138a	951,890.60	1,162,387.00
C-9c	954,180.60	1,170,777.20	P-138b	951,991.20	1,162,236.60
P-2	952,712.73	1,163,077.17	P-139	952,290.70	1,162,136.90
P-10	952,091.20	1,162,636.60	P-141	951,540.60	1,166,036.50
P-27	952,364.40	1,164,503.70	P-142a	952,187.15	1,167,100.53
P-30	951,591.40	1,165,436.20	P-142b	951,840.70	1,167,265.60
P-32a	951,068.80	1,166,137.20	P-142c	951,789.80	1,167,407.20
P-32b	951,091.30	1,165,986.30	P-146	950,490.90	1,168,536.20
P-41	950,586.30	1,167,335.30	P-148	950,741.20	1,168,786.40
P-43a	951,797.96	1,167,136.45	P-169	952,141.00	1,164,037.30
P-43b	951,586.28	1,167,083.60	P-172	952,123.40	1,164,265.10
P-49a	952,431.20	1,166,474.10	P-175	951,544.00	1,163,920.00
P-49b	952,345.74	1,166,699.21	P-196	951,841.00	1,162,687.10
P-53	951,759.51	1,166,235.46	P-201	952,041.10	1,162,887.30
P-82	952,326.40	1,165,226.90	P-206	951,309.10	1,163,853.30
P-104a	952,284.06	1,165,587.66	P-210	950,991.20	1,165,336.00
P-104b	952,309.68	1,165,748.11	P-220	951,999.00	1,165,264.00


**LEGEND**

Geological Unit	Symbol	Geologic Conventions	Symbol
Qal	ALLUVIAL QUATERNARY	Overlapping	FAULTS
Tsm	MESA FORMATION	PLICATION (FOLDING)	Anticline
Tmhi	LOS LIMONES FORMATION	Syncline, east covered	Syncline
Tmhs	SAN ANTONIO FORMATION	AVERAGE BEARING AND DIP	Inclined
Tmhc	CAMBRAS FORMATION	Horizontal	Horizontal
T12	T12 AGGREGATE	PHOTOLOGICAL BEARING AND DIP *	Between 0 and 10°
T11	T11 AGGREGATE	Between 15 and 30°	Greater than 40°
Kco	CORDOBA FORMATION		
Kso	OLINI GROUP		
Klg	GUAGUAQUI GROUP		
Kipr	PUERTO ROMERO FORMATION		

\* DIP corresponds to the word "BUZAMINOTOS" not "BUZAMINETOS" which doesn't exist



**OVERSEAS PRIVATE INVESTMENT CORPORATION**




**JOSHI TECHNOLOGIES INTERNATIONAL, INC.**

**ASSESSMENT OF ENVIRONMENTAL IMPACT AND INDUSTRIAL SAFETY IN DEVELOPMENT WELLS PALAGUA - CAIPAL FIELD PUERTO BOYACA (BOYACA, COLOMBIA)**

**GEOLOGICAL MAP**

SCALE 1:20,000



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COORDINATE SYSTEM: **GAUSS - KRUGER BOGOTA**

DATE: **APRIL 2010**

MAP # **4**

Revised by: **RODRIGO DOMINGUEZ P.**