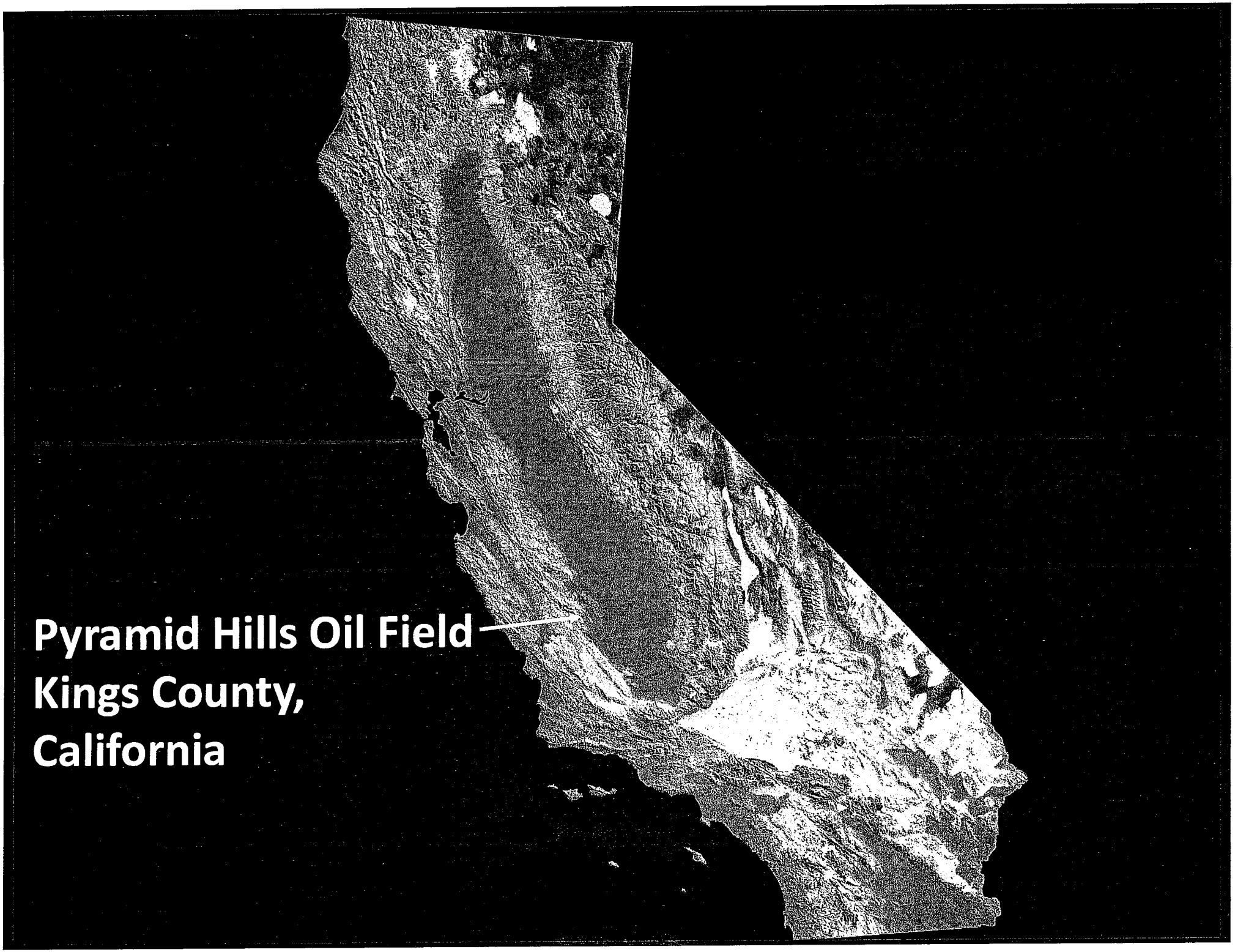
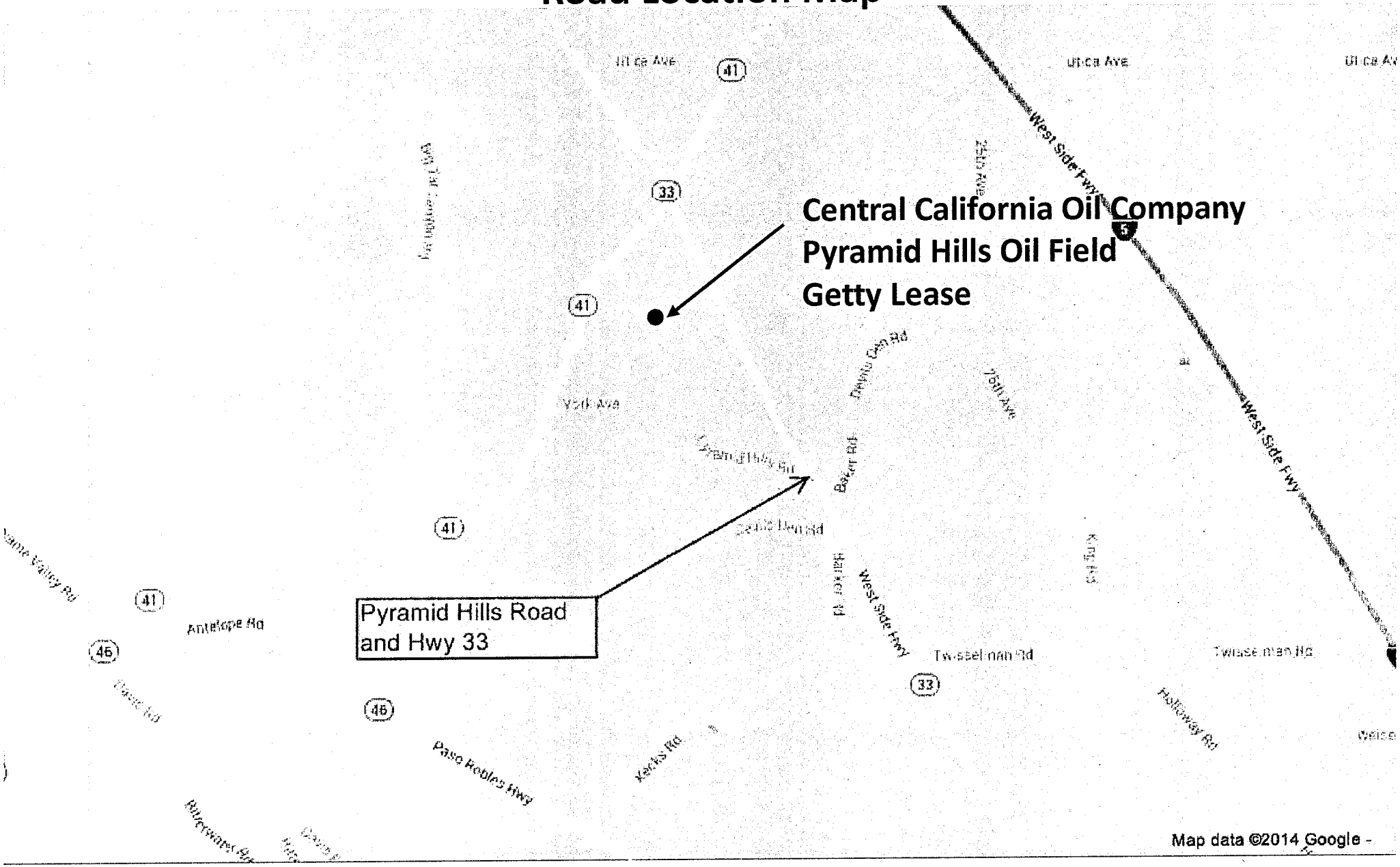
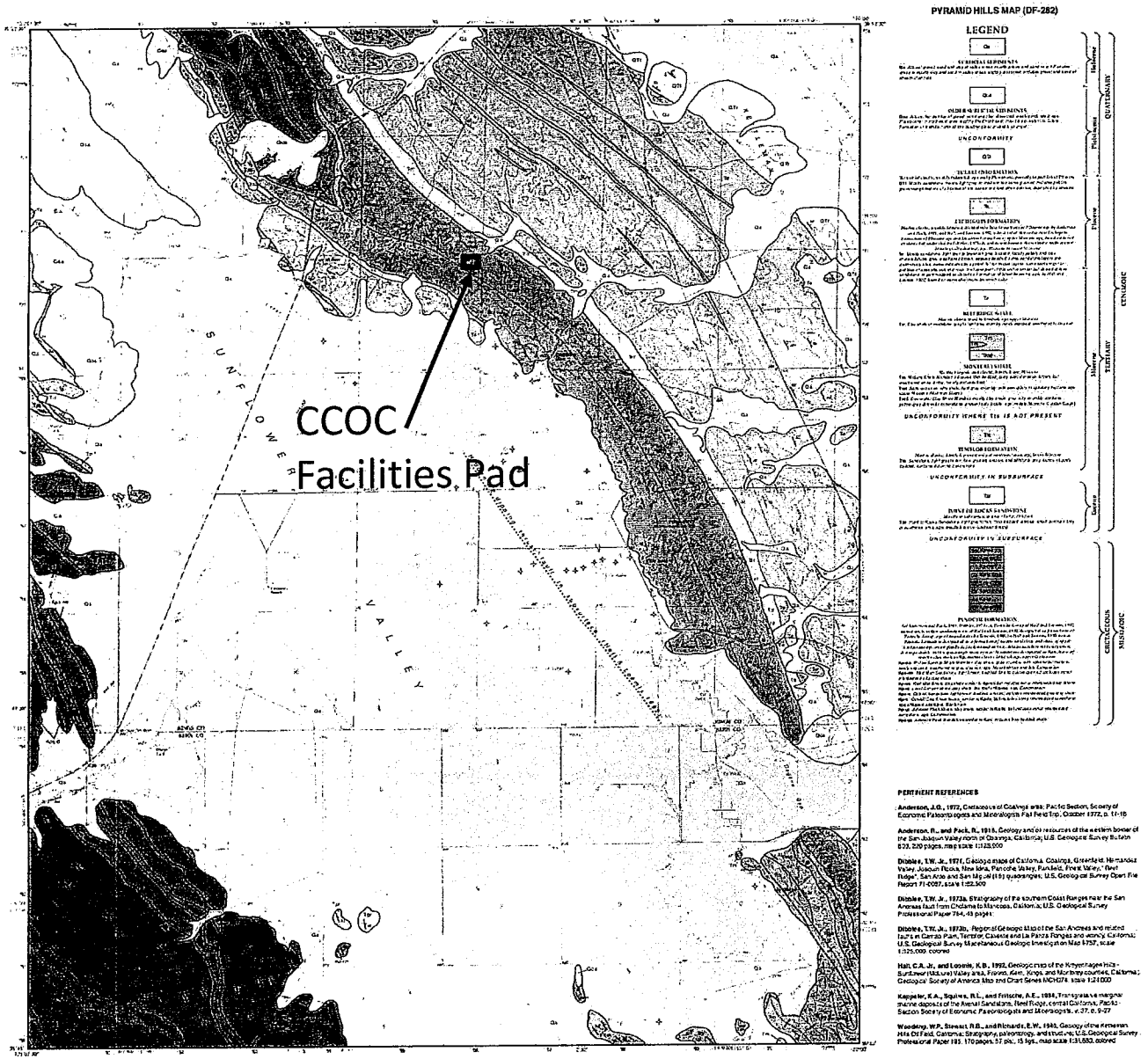
RECEIVED
JUN 15 2015

Central California Oil Company
Pyramid Hills Oil Field
Getty Lease
Kings County, California
Surface Impoundment Location
6/12/15


Pyramid Hills Oil Field
Kings County,
California

Central California Oil Company
Pyramid Hills Oil Field
Kings County, California
Road Location Map





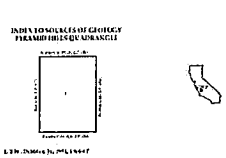
Central California Oil Company
Pyramid Hills Oil Field
Getty Lease
Kings County, California

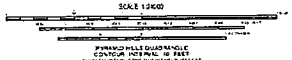
Surface Geologic Map
Pyramid Hills Quadrangle

Note CCOC facilities Pad annotated in red in Section 18

Next Map is a blow up of Section 18 and surrounding vicinity.

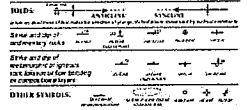
The "orange/brown" unit (Tm) is the Upper Miocene McLure Shale Member of the "Monterey Formation". The Physiographic Feature know as the Pyramid Hills is underlain by the McClure Shale. One of the richest oil source rocks in the world.

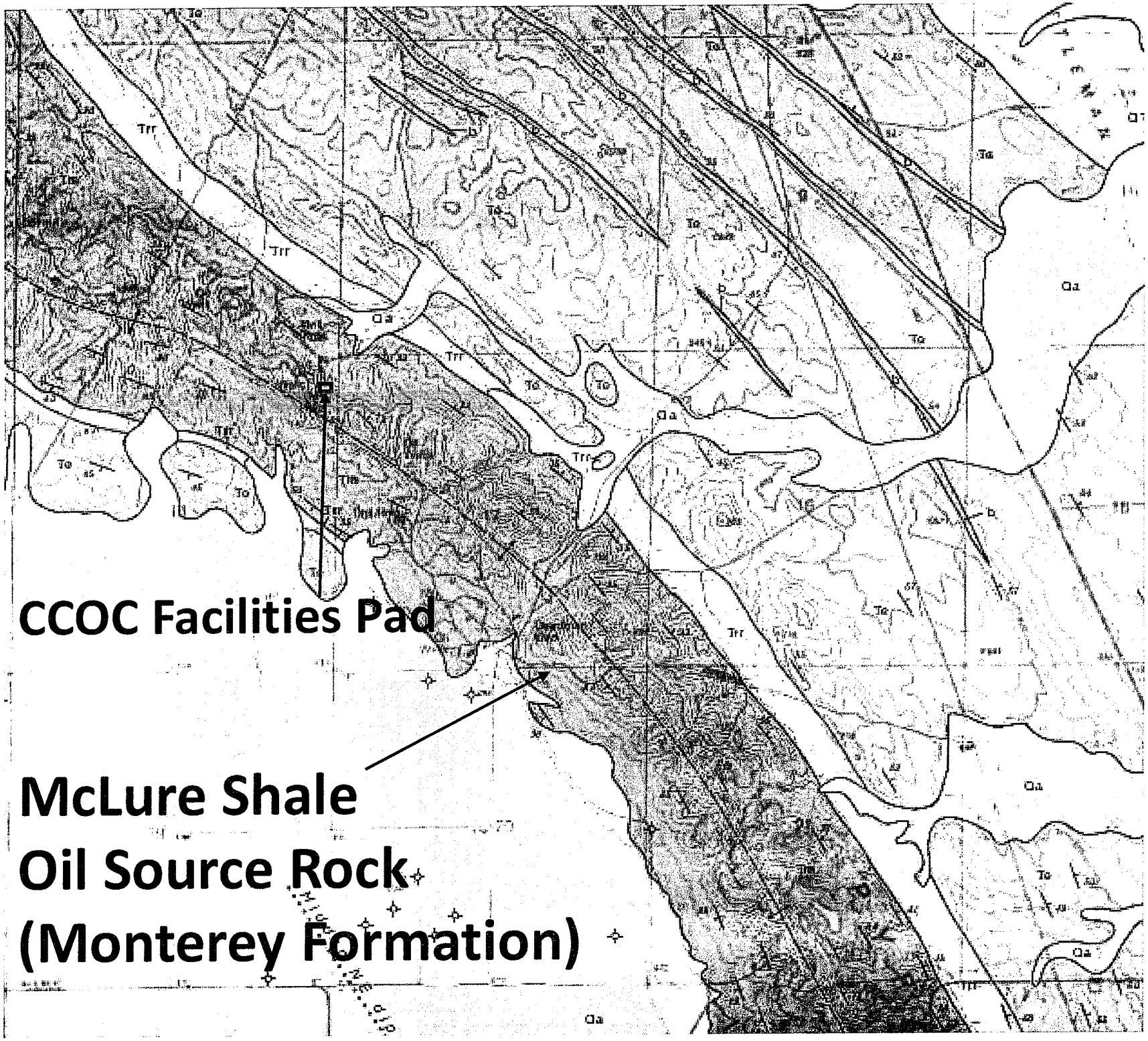


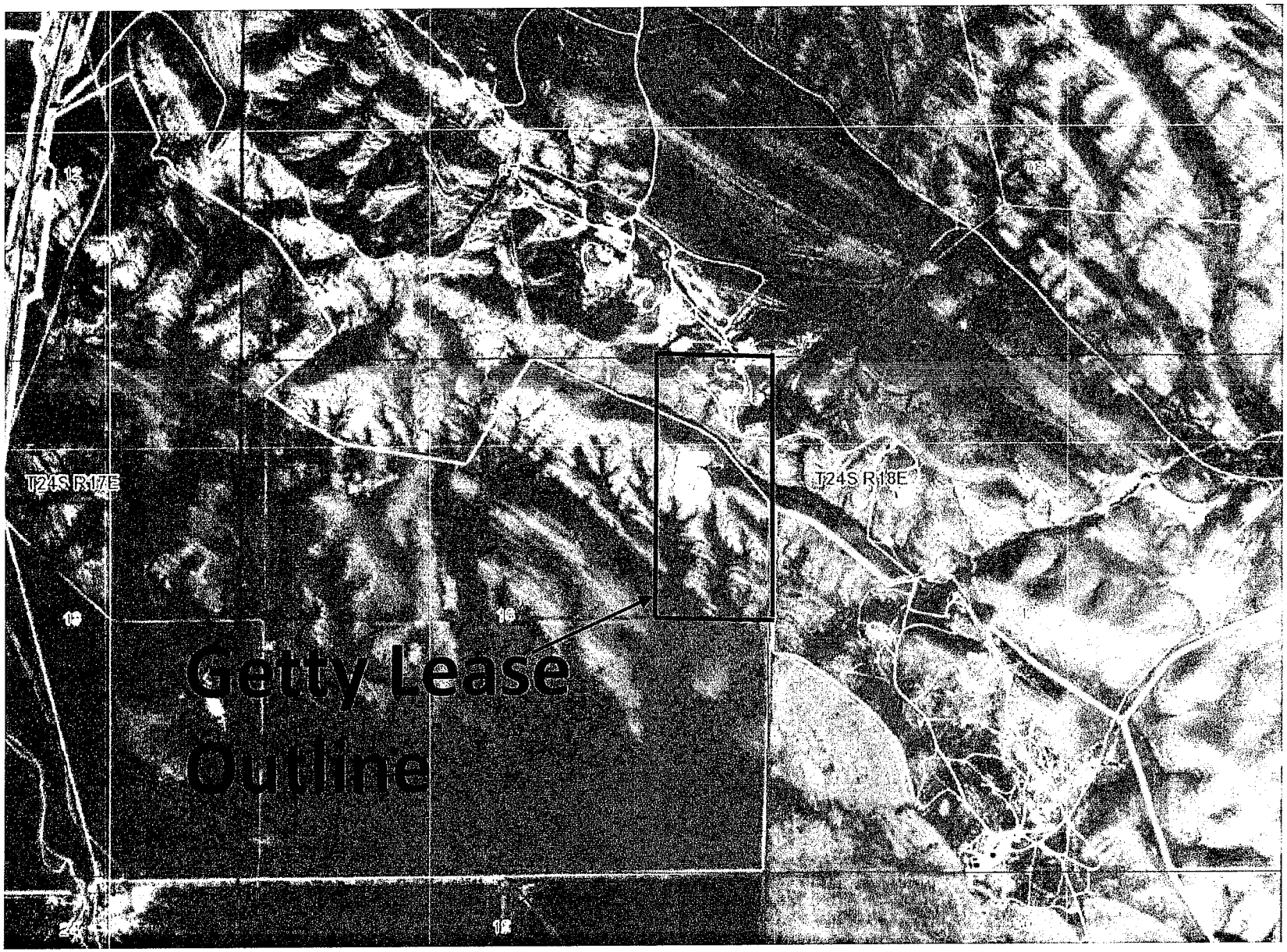


GEOLOGIC MAP OF THE
PYRAMID HILLS QUADRANGLE
KINGS and KERN COUNTIES, CALIFORNIA

BY THOMAS W. DIBBLEE, JR., 2006
EDITED BY JOHN A. MINCH




CCOC Facilities Pad
McLure Shale
Oil Source Rock
(Monterey Formation)



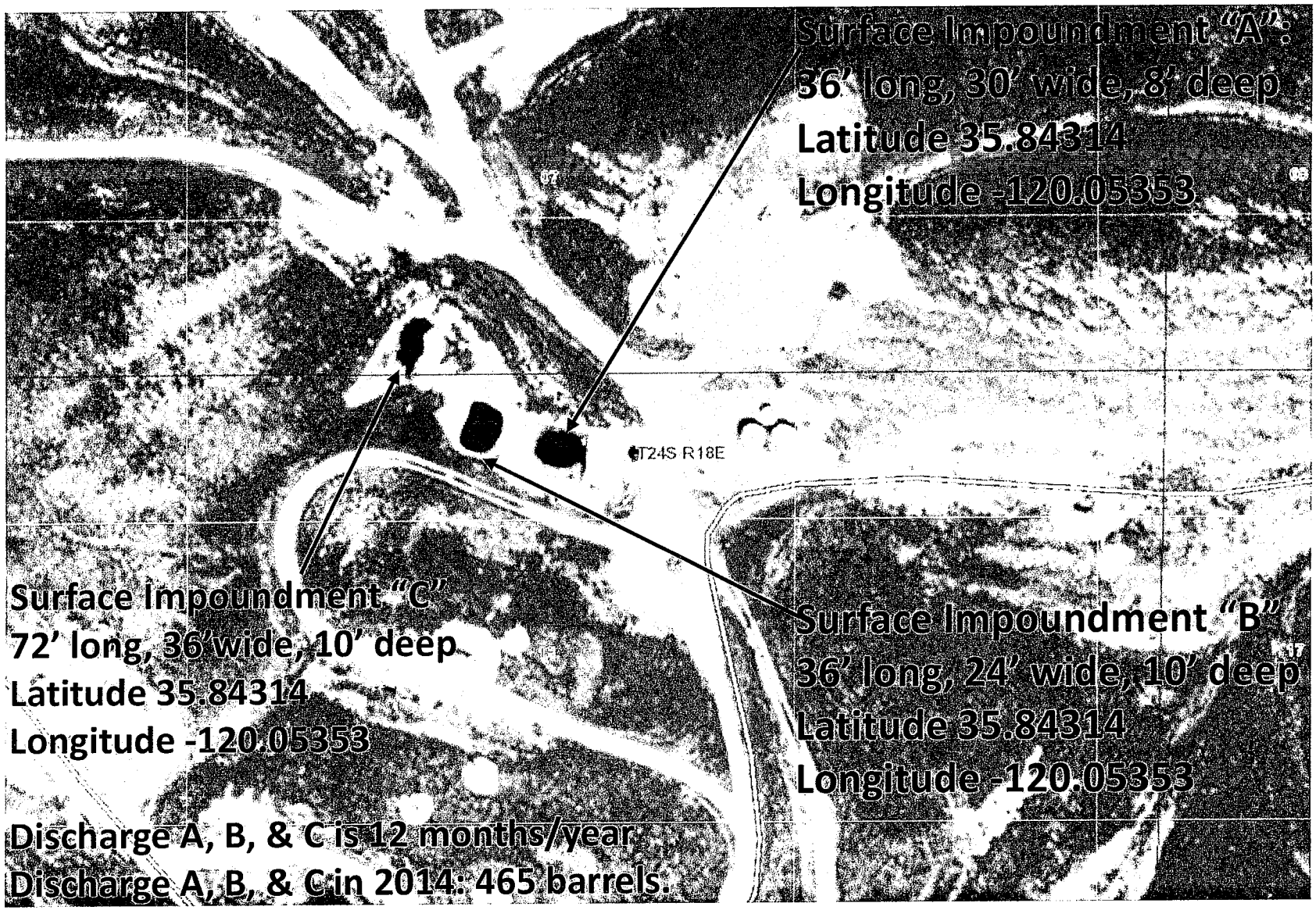
Central California Oil Company

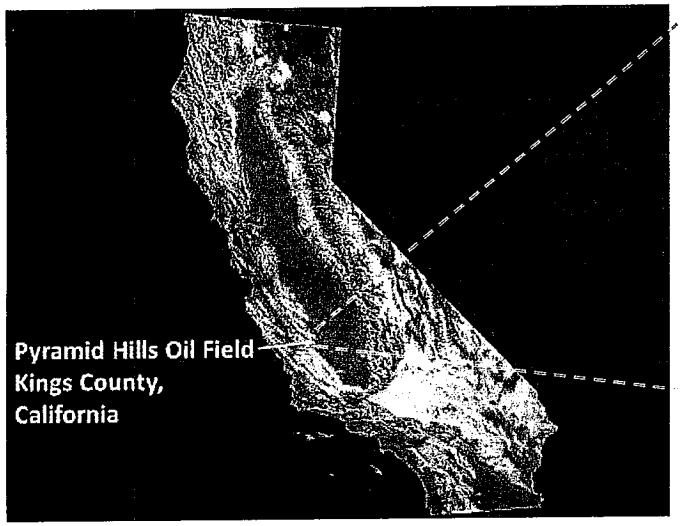
Pyramid Hills Oil Field

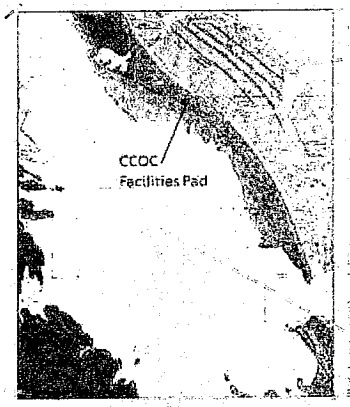
Kings County, CA

Getty Lease Outline

Central California Oil Company
Pyramid Hills Oil Field Getty Lease
Facilities Pad & Surface Impoundments "A", "B", & "C"
APN: 906-001-064-000







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Getty Lease
Kings County, California

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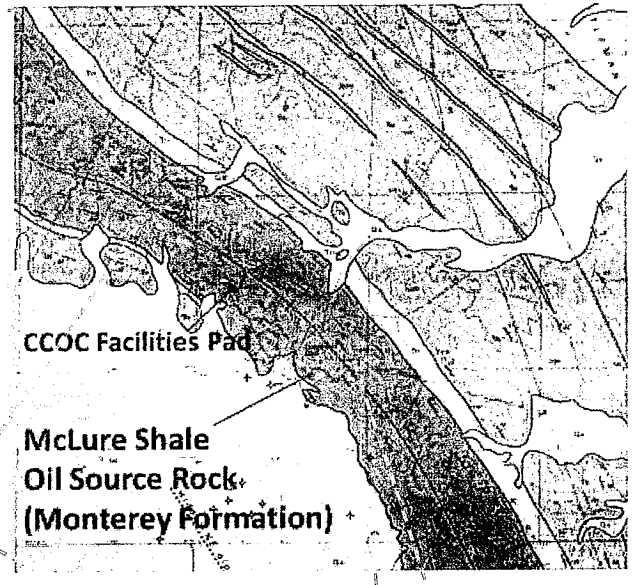
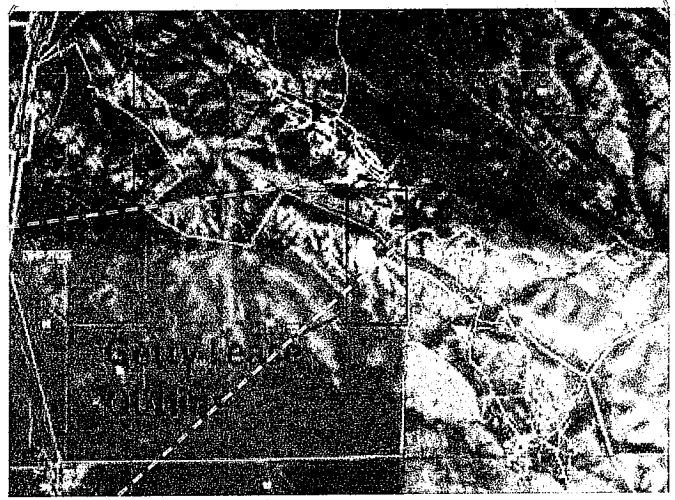




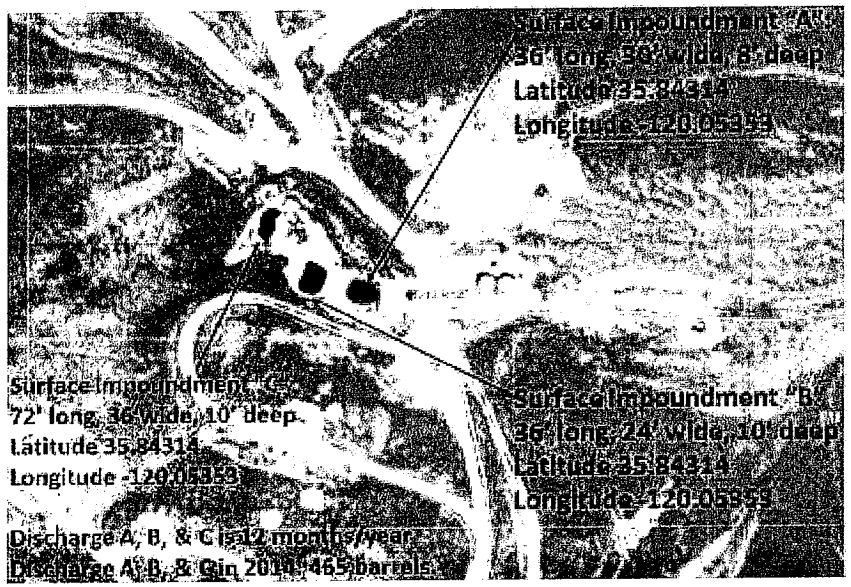
Central
California
Oil
Company

Pyramid
Hills
Oil Field

Kings
County, CA

Getty Lease
Outline

Central California Oil Company
Pyramid Hills Oil Field Getty Lease
Facilities Pad & Surface Impoundments "A", "B", & "C"
APN: 906-001-064-000



Central California Oil Company
Pyramid Hills Oil Field
Getty Lease
Kings County, California
Surface Impoundment Location
6/12/15

ZALCO LABORATORIES, INC.
Analytical & Consulting Services

4309 Armour Avenue
Bakersfield, California 93308

(661) 395-0539
FAX (661) 395-3069

May 13, 2015

Joe Covello
Central California Oil Company
P O Box 22050
Bakersfield, CA 93390

TEL: -
FAX: -

Project ID:
RE: 1504158

Dear Joe Covello:

Zalco Laboratories, Inc. received 1 samples on 4/14/2015 for the analyses presented in the following report.

We appreciate your business and look forward to serving you in the future. Please feel free to call our office if you have any questions regarding these test results.

Sincerely,

Juan Magana
Project Manager
CC:

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative
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Central California Oil Company	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: **1504158**
P O Box 22050	Project #:	Reported: 05/13/2015
Bakersfield, CA 93390	Attention: Joe Covello	Received: 04/14/2015 15:50

Lab Sample ID: **1504158-01**

Client Sample ID: Getty Lease- Water Leg Of Wash Tank Upstream Of Sump

Collected By:

Date Collected: 4/14/2015 11:55:00AM

Analyte	Results	PQL		Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Alkalinity									
Total Alkalinity	4300	10		mg/L		SM 2320B	4/15/15	4/15/15	SAM
Bicarbonate (HCO3)	4300	10		mg/L		SM 2320B	4/15/15	4/15/15	SAM
Carbonate (CO3)	<10	10		mg/L		SM 2320B	4/15/15	4/15/15	SAM
Hydroxide (OH)	<10	10		mg/L		SM 2320B	4/15/15	4/15/15	SAM
CAM, Toxicity (17 Metals)			*TTLC Limits*						
Antimony	<0.20	0.20	*500*	mg/L		SW846 6010B	4/17/15	4/21/15	SS
Arsenic	<0.020	0.020	*500*	mg/L		SW846 6010B	4/17/15	4/21/15	SS
Barium	15	0.10	*10000*	mg/L		SW846 6010B	4/17/15	4/21/15	SS
Beryllium	<0.010	0.010	*75*	mg/L		SW846 6010B	4/17/15	4/21/15	SS
Cadmium	<0.010	0.010	*100*	mg/L		SW846 6010B	4/17/15	4/21/15	SS
Chromium	<0.050	0.050	*2500*	mg/L		SW846 6010B	4/17/15	4/21/15	SS
Cobalt	<0.10	0.10	*8000*	mg/L		SW846 6010B	4/17/15	4/21/15	SS
Copper	<0.050	0.050	*2500*	mg/L		SW846 6010B	4/17/15	4/21/15	SS
Lead	<0.050	0.050	*1000*	mg/L		SW846 6010B	4/17/15	4/21/15	SS
Mercury	<0.0020	0.0020	*20*	mg/L		SW846 7470A	4/16/15	4/16/15	SS
Molybdenum	<0.10	0.10	*3500*	mg/L		SW846 6010B	4/17/15	4/21/15	SS
Nickel	0.061	0.050	*2000*	mg/L		SW846 6010B	4/17/15	4/21/15	SS
Selenium	<0.05	0.05	*100*	mg/L		SW846 6010B	4/17/15	4/21/15	SS
Silver	<0.020	0.020	*500*	mg/L		SW846 6010B	4/17/15	4/21/15	SS
Thallium	<0.50	0.50	*700*	mg/L		SW846 6010B	4/17/15	4/21/15	SS
Vanadium	<0.10	0.10	*2400*	mg/L		SW846 6010B	4/17/15	4/21/15	SS
Zinc	<0.050	0.050	*5000*	mg/L		SW846 6010B	4/17/15	4/21/15	SS
General Chemistry			*MCL Limits*						
Fluoride	<1.0	1.0	*2*	mg/L		EPA 300.0	4/15/15	4/15/15	MSS
Nitrate as NO3	<500	500	*45*	mg/L		EPA 300.0	4/15/15	4/15/15	MSS
Electrical Conductivity	18	0.010		mmhos/cm		SM 2510B	4/15/15	4/15/15	SAM
Chloride	3700	500		mg/L		EPA 300.0	4/15/15	4/15/15	MSS
pH	7.60			pH Units		EPA 150.1	4/15/15	4/15/15	SAM
Sulfate as SO4	<5.0	5.0		mg/L		EPA 300.0	4/15/15	4/15/15	MSS
Total Dissolved Solids	11000	10		mg/L		SM 2540C	4/17/15	4/17/15	SAM
Hardness									
Hardness (as CaCO3)	170	2.0		mg/L		SM 2340B	4/16/15	4/16/15	SS

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative

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Central California Oil Company	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: 1504158
P O Box 22050	Project #:	Reported: 05/13/2015
Bakersfield, CA 93390	Attention: Joe Covello	Received: 04/14/2015 15:50

Lab Sample ID: **1504158-01** Collected By:

Client Sample ID: Getty Lease- Water Leg Of Wash Tank Upstream Of Sump Date Collected: 4/14/2015 11:55:00AM

Analyte	Results	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Metals								
Lithium	1.1	0.10	mg/L		EPA 200.7	4/16/15	4/16/15	SS
Metals - As Received								
Magnesium	28	0.050	mg/L		EPA 200.7	4/16/15	4/16/15	SS
Potassium	19	0.50	mg/L		EPA 200.7	4/16/15	4/16/15	SS
Sodium	5900	70	mg/L		EPA 200.7	4/16/15	4/16/15	SS
Calcium	23	0.050	mg/L		EPA 200.7	4/16/15	4/16/15	SS
Iron	<0.10	0.10	mg/L		EPA 200.7	4/16/15	4/16/15	SS
Boron	12	0.10	mg/L		EPA 200.7	4/16/15	4/16/15	SS
Barium	13	0.10	mg/L		EPA 200.7	4/16/15	4/16/15	SS
Copper	<0.050	0.050	mg/L		EPA 200.7	4/16/15	4/16/15	SS
Silica (SiO2)	18	4.0	mg/L		EPA 200.7	4/16/15	4/16/15	SS
Strontium	5.9	0.10	mg/L		EPA 200.7	4/16/15	4/16/15	SS
Manganese	<0.030	0.030	mg/L		EPA 200.7	4/16/15	4/16/15	SS
Oil & Grease Testing								
TRPH	<5.00	5.00	mg/L		EPA 1664	4/29/15	4/29/15	BIG
Semivolatile Organic Compounds								
Indeno(1,2,3-cd)pyrene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Naphthalene	26.7	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Acenaphthylene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Acenaphthene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Fluorene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Phenanthrene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Anthracene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Fluoranthene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Pyrene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Benzo (a) anthracene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Chrysene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Benzo (b) fluoranthene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Benzo (k) fluoranthene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Benzo (a) pyrene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Dibenz (a,h) anthracene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Benzo (g,h,i) perylene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM

Surrogates	% Recovery	Recovery Limits	Flag

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative

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Bakersfield, CA 93390	Attention: Joe Covello	Received: 04/14/2015 15:50

Lab Sample ID: **1504158-01** Collected By:

Client Sample ID: Getty Lease- Water Leg Of Wash Tank Upstream Of Sump Date Collected: 4/14/2015 11:55:00AM

Analyte	Results	PQL		Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Semivolatile Organic Compounds									
Nitrobenzene-d5		36.6	0-95					4/20/15 14:56	
2-Fluorobiphenyl		41.7	0-92					4/20/15 14:56	
Terphenyl-dl4		85.0	0-100					4/20/15 14:56	
Subcontracted Analyses									
Gross Alpha	78.8			pCi/L		SM 7110C	4/21/15	4/22/15	JMM
Radium-226	1.50	0.470		pCi/L		E903.1	4/17/15	5/11/15	JMM
Radium-228	<0.506	0.506		pCi/L		EPA Ra-05	4/28/15	4/30/15	JMM
Uranium (ug/L)	0.198			pCi/L		E908	4/29/15	4/29/15	JMM
Volatile Organic Compounds									
m,p-Xylene	51.7	5.00		ug/L		SW846 8260B	4/21/15	4/21/15	HLP
Benzene	87.9	5.00		ug/L		SW846 8260B	4/21/15	4/21/15	HLP
Xylenes, total	90.8			ug/L		SW846 8260B	4/21/15	4/21/15	HLP
Methyl tert-Butyl Ether	<5.00	5.00		ug/L		SW846 8260B	4/21/15	4/21/15	HLP
Ethylbenzene	29.2	5.00		ug/L		SW846 8260B	4/21/15	4/21/15	HLP
Toluene	62.2	5.00		ug/L		SW846 8260B	4/21/15	4/21/15	HLP
o-Xylene	39.1	5.00		ug/L		SW846 8260B	4/21/15	4/21/15	HLP
Surrogates		**% Recovery**	**Recovery Limits**	**Flag**					
1,2-Dichloroethane-d4		119	89-165					4/21/15 13:40	
Toluene-d8		119	65-124					4/21/15 13:40	
4-Bromofluorobenzene		113	94-114					4/21/15 13:40	

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4309 Armour Avenue, Bakersfield, CA 93308 (661) 395-0539 FAX (661) 395-3069 www.zalcolabs.com

CHAIN OF CUSTODY, ID# 1504158

Page _____ of _____

Zalco Lab # _____

Client PO # _____

PROJECT ID: _____

QUOTE ID:

REPORT INFO		INVOICE INFO	
Client:	Central Calif Oil Co	Invoice To: Same as Client ☐	CGR, LLC
Address:	PO Box 22050	Address:	PO Box 2858
City, State, Zip:	Bakersfield, CA 93390	City, State, Zip:	Carmel, CA 93921
Attention:	Joe Covello	Attention:	RT Buddan
Phone: Results ☐	661 663-0802	Phone:	831 277-4181
Fax: Results ☐		Fax:	
Email: Results ☐	t.buddan@compassgr.com	Email:	t.buddan@compassgr.com

SAMPLED BY: Hopps EMPLOYED BY: REC1

Sample No.*	Sample Description	Date	Sample Time	Type*	# OF CONTAINERS	ANALYSIS: See Attached								TEMPERATURE (C°)
1	Getty lease - Water leg of Wash Tank Upstream of sump.	4/14/15	11:55			X								10.4°

COMMENTS:

Turnaround Time:

Routine _____ working days ☐

Rush By _____ working days

Send Copy to State of CA? Yes ☐ No ☐

Attention To: _____

Send Copy to County? Yes ☐ No ☐

County _____

Logged-In Subbed Printed

Sent to Short Hold Time

RELINQUISHED By: Signature	PRINT	COMPANY	Date	Time	RECEIVED By: Signature	PRINT
T Hopps	Tom Hopps	REC1	4/14/15	3:50 PM	M Gillman	M Gillman

NOTE: Samples are discarded 30 days after results unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client's expense.

*Sample Type Key: AQ-Aqueous; BS-Biosolid; DW-Drinking Water; GW-Ground Water; G-Gas; LPG-Liquid Petroleum Gas; OL-Oil; O-Other; P-Petroleum; S-Soil/Solid; ST-Storm Water; WW-Wastewater

*Sample No.: FOR OFFICE USE ONLY

ATTACHMENT B

Water Quality Analysis

Wastewater samples collected from the ponds shall be analyzed by a laboratory certified by the Environmental Laboratory Accreditation Program using currently applicable United States Environmental Protection Agency-approved analytical methods for water for the following:

A. Total dissolved solids;

B. Metals listed in California Code of Regulations, title 22, section 66261.24. subdivision (a)(2)(A);

C. Benzene, toluene, ethylbenzene, and xylenes;

D. Total petroleum hydrocarbons as crude oil;

E. Polynuclear aromatic hydrocarbons (including acenaphthene, acenaphthylene, anthracene, benzo[a]anthracene, benzo[b]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, chrysene, dibenzo[a,h]anthracene, fluoranthene, fluorine, indeno[1,2,3-cd]pyrene, naphthalene, phenanthrene, and pyrene);

F. Radionuclides listed under California Code of Regulations, title 22, Table 64442;

G. Major and minor cations (including sodium, potassium, magnesium, and calcium);

H. Major and minor anions (including nitrate, chloride, sulfate, carbonate, bicarbonate, and bromide);

I. Trace elements (including lithium, strontium, boron, iron, and manganese).

Reporting Requirements

Water Quality information shall be submitted in a technical report that includes at a minimum:

A. Site plan(s) with the location(s) of where the samples were collected;

B. A description of how the samples, representative of the pond contents, were collected;

Table(s) of analytical results organized by pond number with the data also submitted electronically as an Excel spreadsheet.