

Jack Jones ExxonMobil - Goleta 12000 Calle Real Goleta, CA 93117

15 January 2016

RE: Santa Ynez Unit - LFC Work Order: 1600235

Dear Client:

Enclosed is an analytical report for the above referenced project. The samples included in this report were received on 13-Jan-16 15:35 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Marissa L. Censullo

Marie Centillos

Project Manager

TEL: (805) 922-4772

www.oecusa.com FAX: (805) 925-3376



ExxonMobil - Goleta Project: Santa Ynez Unit - LFC

12000 Calle Real Project Number: Annual LFC Produced Crude Oil **Reported:**Goleta CA, 93117 Project Manager: Jack Jones 15-Jan-16 14:34

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ABJ 3401A	1600235-01	Product	13-Jan-16 13:30	13-Jan-16 15:35
ABJ 3401B	1600235-02	Product	13-Jan-16 13:55	13-Jan-16 15:35

Oilfield Environmental and Compliance

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12000 Calle Real Project Number: Annual LFC Produced Crude Oil **Reported:**Goleta CA, 93117 Project Manager: Jack Jones 15-Jan-16 14:34

ABJ 3401A 1600235-01 (Product)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Oilfield Environmental and Compliance									
ASTM/GPA/UOP/CARB Method									
API gravity	20.7	0.1	°API	1	B6A0341	14-Jan-16	15-Jan-16	ASTM D287	
BS&W									
Total Cut on Free Oil	0.050		% by Volume	1	B6A0334	14-Jan-16	15-Jan-16	ASTM D96/4007	
BS&W Water	0.000		"	"	"	"	"	"	
BS&W Sediment	0.050		"	"	"	"	"	"	
BS&W Emulsion	0.000		"	"	"	"	"	"	
BS&W Oil	99.950		"	"	"	"	"	"	
Vapor Pressure									
Reid Vapor Pressure (RVP)	3.60	0.05	psi	1	B6A0333	14-Jan-16	15-Jan-16	ASTM D323	
True Vapor Pressure (TVP)	2.9 @ 88°F	0.1	psia	"	"	"	"	CARB Calc.	

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12000 Calle Real Project Number: Annual LFC Produced Crude Oil **Reported:**Goleta CA, 93117 Project Manager: Jack Jones 15-Jan-16 14:34

ABJ 3401B 1600235-02 (Product)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
Oilfield Environmental and Compliance										
ASTM/GPA/UOP/CARB Method										
API gravity	20.0	0.1	°API	1	B6A0341	14-Jan-16	15-Jan-16	ASTM D287		
BS&W										
Total Cut on Free Oil	0.050		% by Volume	1	B6A0334	14-Jan-16	15-Jan-16	ASTM D96/4007		
BS&W Water	0.050		"	"	"	"	"	"		
BS&W Sediment	0.000		"	"	"	"	"	"		
BS&W Emulsion	0.000		"	"	"	"	"	"		
BS&W Oil	99.950		"	"	"	"	"	"		
Vapor Pressure										
Reid Vapor Pressure (RVP)	4.00	0.05	psi	1	B6A0333	14-Jan-16	15-Jan-16	ASTM D323		
True Vapor Pressure (TVP)	3.6 @ 94°F	0.1	psia	"	"	"	"	CARB Calc.		

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12000 Calle Real Project Number: Annual LFC Produced Crude Oil **Reported:**Goleta CA, 93117 Project Manager: Jack Jones 15-Jan-16 14:34

BS&W - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch B6A0334 - ASTM Method Prep by volume

Duplicate (B6A0334-DUP1)	Source:	1505430-01 F	Prepared: 14-Jan-16 Analyzed: 1	5-Jan-16	
Total Cut on Free Oil	14.000	% by Volume	14.000	0	15
BS&W Water	13.950	"	13.950	0	15
BS&W Sediment	0.050	"	0.050	0	40
BS&W Emulsion	0.000	"	ND		40
BS&W Oil	86.000	"	86.000	0	15

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12000 Calle Real Project Number: Annual LFC Produced Crude Oil **Reported:**Goleta CA, 93117 Project Manager: Jack Jones 15-Jan-16 14:34

Notes and Definitions

TVPa 3.6 @ 94°F

TVP 2.9 @ 88°F

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



	Oilfield Environmental and Compliance	CHAIN OF CUSTODY
	307 Roemer Way Suite 300, Santa Maria, CA 93454 101 Adkisson Way, Tai	t, CA 93268
The Control of the Co	Phone: (805) 922-4772 Fax: (805) 925-3376 www.oecusa.com Phone: (661) 762-9143	Page1 of1

Company: E	XXONMOBIL	COMPA	NY			· · · · · · · · · · · · · · · · · · ·	*; ×		·	Projec	ct Nam	ne/#:	Anni	ual LF	C Pr	oduc	ced C	rude	Oil		
Address: 1	1200 Calle Real									Site: LFC											
city/State/ZIP:	Goleta,CA 9311	17								Analysis Requested									Special Instruc	tions:	
Phone: (805)571-0426	Fax:			E-mail:jack	c.e.jones@exx	onmobil.cor	n .			7	F									
Report To: J	Jack Jones Sampler: CJ Reynolds									م	Gan:ty	V)									
Report Format(s):	FAX-	PDF (std)	• Д	Colt/LUF	TEDF-	EDD)- []			NP	2,5	-									. '
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	COC RECEIVED DATE/TIME: _	01-1	3-16	<u>1</u> 535	LOGIN DATE/TIME	: <u>01-1</u>	13-16	Acceptable Range: 0°C to 6°C [see e:	REFRIGERATOR(S):	7	
SAMPLE TRAN	SPORT		SAMPLE	RECEIPT, COND	DITION, PRES	ERVATION			YES NO N/A	(**) OE	C PRES. ID
DEC Courier/Sam	pler		☐ Samples	Received Outside Te	mperature Range [Acceptable]	COC Doc	cument(s) Received With Samples	A 0 · 0		
Delivery (Other th	an OEC)		∀ Dire	ect from Field, on Ice			Correct 0	Container(s) for Analysis Requeste		\$ ³²	
☐ After-Hours Outside	de Drop-Off [Brought Inside]		☐ Ami	bient: Air or Filter Matr	rìx		Containe	r(s) Intact and in Good Condition			
Initials/Date/Time:			☐ Rec	eived Ambient, Placed	d on Ice for Transpo	ort	Containe	r Label(s) Consistent with COC	A 0 0		
Shipment	Carrier:	***************************************	☐ Sam	nple Temperature Acc	eptable for Analysis	s Requested	Proper P	reservation on Sample Label(s)			·
Tracking #:			☐ Samples	Received Outside Tel	mperature Range [Exception]	OEC Pre	servative Added **			
CUSTODY SEA	LS None Prese	ent	☐ See	Problem Chain *			VOA Con	ntainers Free of Headspace			
Cooler(s): Preser	nt, Intact 🔲 Present, Not Intac	ct None	_ Insu	ifficient Ice or Unknow	n Cause		Tedlar Ba	ag(s) Free of Condensation			
Sample(s): Preser	nt, Intact Present, Not Intac	t 🗌 None	☐ Exp	edited PM Notification	[Init/Date/Time]: _			(*) PROI	BLEM CHAIN FORM I	REQUIRE	D
CONTAINERS	COC CHANGES, AND/	OR CORRE	CTIONS								····
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307 Roemer Way, Suite 300, Santa Maria, Ca 93454

101 Adkisson Way, Taft, Ca 93268 Phone: 805-922-4772 / 661-762-9143

AR@oecusa.com

Date: 01/13/2016	
Employee Name: Clarence Roynel	Li
Client Name: Exxon Mole: le	
· •	1 Crude Oil / LFC
Roundtrip Drive Time: 2	Roundtrip Drive Mileage: //2_
Start Field Time: /300	Stop Field Time: 1430
Start Field Mileage: 131416	Stop Field Mileage: 131419
Consumables: 2 x HoST Chamb	er, 6 X Pint Mason Jar
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Decription / Comment: Collected 2 (Coude Oil Samples at the
Las Flores Camp	ande Oil Samples at the
	01 48 hr TAT
•	
Admin Use:	
Name:	Initials: Date:
Total Drive Time:	Total Field Time:
Total Drive Mileage:	Total Field Mileage: