

## Reconnaissance and surface exploration

### ARES second quarter 2022

Company	Project	Technology
BHP Billiton	ARES-BHP-MX-18-4Q5/3359-22	Geotechnical studies

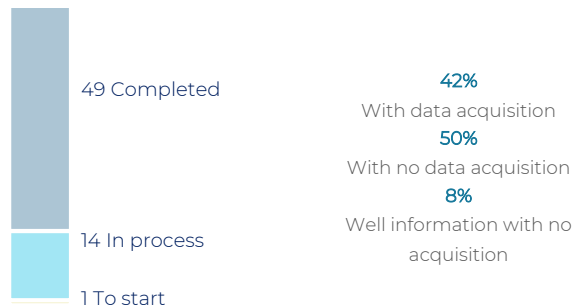
### ARES register

**102**  
Companies registered in  
ARES

#### Top 5. Companies with most projects

Top	Company	Projects
1	Dowell-Slb	13
2	Seitel	8
3	TGS	8
4	CGG México	7
5	Pemex	6

### 64 current authorized projects



## Approved Exploration Plans and Appraisal Programs

Operator	Block	Plan / Program	Approval date	Investment MMUSD	Wells
Pemex Exploración y Producción	AE-0124	Appraisal Program (Tum-1EXP)	5-Apr-22	54.55	1
	AE-0175 y AE-0385	Appraisal Program (Chawila-1EXP)	7-Apr-22	12.21	1
	CNH-R03-L01-AS-CS-13/2018	Modification to the Exploration Plan	7-Apr-22	87.02	2
	AE-0149	Modification to the Exploration Plan	28-Apr-22	185.15	4
	AE-0386	Modification to the Exploration Plan	28-Apr-22	9.99	1
	AE-0154	Appraisal Program (Tlalkivak-1EXP)	10-May-22	89.64	1
	AE-0154	Modification to the Exploration Plan	10-May-22	71.73	2
	CNH-R02-L01-A8-CS/2017	Modification to the Exploration Plan	17-May-22	33.74	1
	AE-0151	Appraisal Program (Tlakati-1EXP)	24-May-22	64.07	2
	AE-0178	Exploration Plan	2-Jun-22	7.09	1
Eni México	AE-0387	Modification to the Exploration Plan	30-Jun-22	12.52	1
	CNH-R02-L04-AP-CS-G05/2018	Modification to the Exploration Plan	5-Apr-22	62.22	1
	CNH-R02-L01-A7-CS/2017	Modification to the Exploration Plan	10-May-22	48.08	1
Chevron Energía de México	CNH-R03-L01-G-CS-01/2018	Modification to the Exploration Plan	19-May-22	116.38	2
	CNH-R02-L04-AP-CS-G03/2018	Modification to the Exploration Plan	7-Apr-22	108.84	1
Murphy Sur	CNH-R01-L04-A5-CS/2016	Modification to the Exploration Plan	7-Apr-22	89.28	1
Hokchi Energy	CNH-R03-L01-AS-CS-15/2018	Modification to the Appraisal Program (Xaxamani-2EXP)	7-Apr-22	52.80	2
Shell Exploración y Extracción de México	CNH-R02-L04-AP-PG04/2018	Modification to the Exploration Plan	12-May-22	55.62	1
Pantera Exploración y Producción 2.2	CNH-R02-L02-A10-CS/2017	Modification to the Exploration Plan	19-May-22	28.31	5
PC Carigali México Operations	CNH-R01-L04-A4-CS/2016	Modification to the Exploration Plan	24-May-22	97.93	1
Wintershall Dea México	CNH-R03-L01-AS-CS-14/2018	Modification to the Exploration Plan	26-May-22	65.52	2
China Offshore Oil Corporation E&P México	CNH-R01-L04-A1.CPP/2016	Modification to the Exploration Plan	28-Jun-22	52.57	1
				<b>1,405.26</b>	<b>35</b>

**Note:**  
The information corresponds to the most conservative scenarios

## Authorized exploration wells Second quarter 2022

Operator	Block	Well	Location	Authorization date	
Pemex Exploración y Producción	AE-0149	Atoyatl-1EXP	Shallow water	10-May-22	
		Popoca-1EXP	Shallow water	19-May-22	
		Nanka-1EXP	Shallow water	28-Jun-22	
	AE-0138	Chucox-101EXP	Onshore	26-Apr-22	
		Charal-1EXP	Onshore	7-Jun-22	
	AE-0175	Chawila-1DEL	Onshore	19-May-22	
		Chuyan-1EXP	Onshore	24-May-22	
	AE-0381	Xunut-1EXP	Onshore	28-Jun-22	
		AE-0385	Chawila-2DEL	Onshore	10-May-22
	Iberoamericana de Hidrocarburos CQ, Exploración & Producción de México	AE-0124	Tum-1DEL	Onshore	16-Jun-22
			AE-0130	Asiki-1EXP	Onshore
		AE-0134	Urhani-1EXP	Onshore	26-May-22
		AE-0140	Tupilco-1DEL	Onshore	5-Apr-22
		AE-0141	Cibix-401EXP	Onshore	30-Jun-22
		AE-0143	Chaya-1001EXP	Onshore	28-Apr-22
		AE-0151	Tlakati-1DEL	Shallow water	30-Jun-22
		AE-0154	Tlalkivak-1DEL	Shallow water	9-Jun-22
AE-0177		Sakgsi-1EXP	Onshore	17-May-22	
Hokchi Energy		CNH-R02-L02-A1.BG/2017	Loma Linda-1EXP	Onshore	5-Apr-22
	Tlacuache-1EXP		Onshore	12-May-22	
	Xaxamani-4DEL		Shallow water	2-Jun-22	
Murphy Sur	CNH-R03-L01-AS-CS-15/2018	Xaxamani-5DEL	Shallow water	2-Jun-22	
		Tulum-1EXP	Deep water	9-Jun-22	
Newpek Exploración y Extracción	CNH-R02-L03-BG-02/2017	Treviño-1EVA	Onshore	26-Apr-22	

**Note:**  
The modifications to drilling authorizations are not considered.

## Authorizations and approvals during 2022

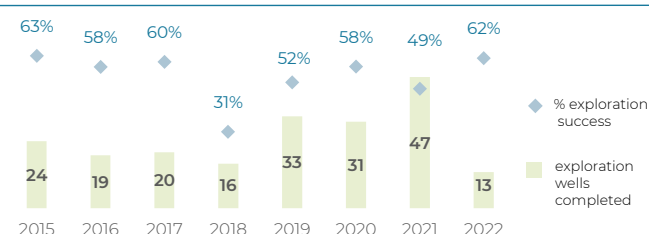
<b>2</b>	ARES projects	<b>34</b>	Exploration wells	<b>55</b>	Plans and Programs
<b>1</b>	With data acquisition	<b>20</b>	Onshore	<b>42</b>	Exploration Plans
<b>1</b>	With no data acquisition	<b>13</b>	Shallow water	<b>13</b>	Appraisal Programs
		<b>1</b>	Deepwater		

## Exploration wells completed

### Result of completed wells in 2022

	Entitlements	Contracts	
Oil discoverer	3	1	13
Oil producer	1		Exploration
Wet gas discoverer		1	
Gas and condensate producer	1		3
Non-commercial producer	3		Appraisal
Water invaded	5	1	
	<b>13</b>	<b>3</b>	

### Exploration success rate



**Notes:**  
Does not include appraisal wells.  
Exploratory success rate includes wells with the following results: producer, discoverer, successful and non-commercial producer.

### Follow up of exploration wells completed in 2022

Operator	Block	Well	Result	Drilling start and end
Pemex Exploración y Producción	AE-0152	Niquita-1DEL	Oil producer	Jan-22 to Feb-22
	AE-0152	Tlense-1EXP	Non-commercial producer	Jan-22 to Apr-22
	AE-0070	Semillal-1EXP	Oil producer	Jan-22
	AE-0060	Valeriana-2DEL	Gas and condensate producer	Jan-22 to May-22
	AE-0142	Dzimpona-1EXP	Invaded by water	Jan-22 to Apr-22
	AE-0141	Cibix-201EXP	Non-commercial producer	Jan-22 to Apr-22
	AE-0140	Tupilco-3001EXP	Oil discoverer	Jan-22 to Mar-22
	AE-0122	Maxtu-1EXP	Non-commercial producer	Jan-22 to Apr-22
	AE-0154	Tlalkivak-1EXP	Oil discoverer	Jan-22 to Apr-22
	AE-0151	Pokche-201EXP	Invaded by water	Jan-22 to May-22
	AE-0160	Wakax-1EXP	Invaded by water	Jan-22 to Feb-22
	AE-0124	Kuun-1DEL	Invaded by water	Jan-22 to Feb-22
	AE-0149	Iyel-1EXP	Invaded by water	Jan-22 to Apr-22
	Operadora Bloque 13	CNH-R02-L03-CS-05/2017	Sochiapán-1EXP	Invaded by water
DS Servicios Petroleros	CNH-M4-ÉBANO/2018	Ébano-3000EXP	Oil discoverer	Jan-22 to Apr-22
Pantera Exploración y Producción 2.2	CNH-R02-L02-A10.CS/2017	Pasuku-1EXP	Wet gas discoverer	Jan-22 to Feb-22

**Notes:**  
With the information available as of August 5, 2022.  
In accordance with the Well Drilling Guidelines (Lineamientos de Perforación de Pozos), there is a deadline for Oil Operators to report to the Commission the final drilling results and completion of exploratory wells; thus, information is subject to change.

Onshore Shallow water

## Discoveries in 2022

Operator	Block	Discovery	Location	Age	Preliminary volume	
					Liquid hydrocarbons (MMb)	Gas (Bcf)
Pemex Exploración y Producción	AE-0151	Tekuani-1EXP	Shallow water	Middle Pliocene	14.47	7.37
		Pokche-101EXP	Shallow water	Cretaceous	9.40	23.90
	AE-0141	Cibix-201EXP	Onshore	Lower Pliocene	40.38	1.78
	AE-0135	Actul-1EXP	Onshore	Lower Pliocene	28.78	13.50
	AE-0150	Macuil-1EXP*	Shallow water	Middle and Lower Pliocene	49.12	19.93
DS Servicios Petroleros	AE-0154	Tlalkivak-1EXP	Shallow water	Cretaceous and Upper Jurassic	28.88	154.22
Eni México	CNH-M4-ÉBANO/2018	Ébano-3000EXP	Onshore	Cretaceous (Upper Tamaulipas)	1.60	0.09
Lukoil Upstream México	CNH-R02-L01-A10.CS/2017	Sayulita-1EXP	Shallow water	Upper Miocene	21.98	5.51
Operadora Bloque 12	CNH-R02-L01-A12.CS/2017	Yoti Oeste-1EXP	Shallow water	Upper Miocene	19.80	11.13
Pantera Exploración y Producción 2.2	CNH-R02-L03-CS-04/2017	Ochpán-1EXP	Onshore	Middle Miocene		8.94
	CNH-R02-L02-A10.CS/2017	Pasuku-1EXP	Onshore	Miocene (Amate)	0.01	11.90
					<b>214.42</b>	<b>258.27</b>

**Note:**  
\*Includes Macuil-1EXP sidetrack.

Approvals and authorizations location  
Second quarter 2022

