OMB Control No.: 1010-0072 Expiration Date 12/31/2024

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF OCEAN ENERGY MANAGEMENT Pacific OCS Region

(Insert Appropriate BOEM Office)

Requirements for Geological and Geophysical Prospecting, Exploration, or Scientific Research on the Outer Continental Shelf Related to Minerals Other than Oil, Gas, and Sulphur

Application to Conduct Geological or Geophysical Prospecting or Noncommercial Exploration or Notice of Scientific Research Related to Minerals Other than Oil, Gas, and Sulphur on the Outer Continental Shelf

(Attachment 1)

Nonexclusive Use Agreement for Noncommercial Exploration or Scientific Research

(Attachment 2)

SUBMIT: One original, one copy of the original, one digital copy, and one public copy (all with original signatures). Contact BOEM for further instruction on digital signature applications.

Paperwork Reduction Act of 1995 (PRA) Statement: The PRA (44 U.S.C. Chapter 35 et seq.) requires us to inform you that the Bureau of Ocean Energy Management (BOEM) collects this information to evaluate applications for permits or authorizations to conduct prospecting or noncommercial exploration offshore and to monitor activities of scientific research conducted under notices. BOEM uses the information to ensure there is no environmental degradation, personnel harm, damage to historical or cultural sites, or interference with other uses. Information requested in this form is required to obtain or retain a benefit. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. The reporting burden for this form is estimated to average 88 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct your comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Bureau of Ocean Energy Management, 45600 Woodland Road, Sterling, Virginia 20166.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF OCEAN ENERGY MANAGEMENT

REQUIREMENTS FOR GEOLOGICAL AND GEOPHYSICAL PROSPECTING, EXPLORATION, OR SCIENTIFIC RESEARCH ON THE OUTER CONTINENTAL SHELF RELATED TO MINERALS OTHER THAN OIL, GAS, AND SULPHUR

Authority

You must perform all geological and geophysical prospecting, noncommercial exploration, or scientific research activities authorized and conducted on the Outer Continental Shelf (OCS) according to the OCS Lands Act, 30 CFR Part 580, as applicable, and other applicable Federal statutes and regulations, as amended.

General Requirements of Permits, Authorizations, and Notices

You must conduct geological and geophysical activities for mineral prospecting, noncommercial exploration, or scientific research activities authorized under Section 11 of the OCS Lands Act, 30 CFR Part 580, as applicable, and in compliance with all applicable mitigation measures so that those activities do not:

- A. Interfere with or endanger operations under any lease or right-of-way or permit issued or maintained under the OCS Lands Act;
- B. Cause harm or damage to aquatic life or to the marine, coastal, or human environment;
- C. Cause pollution;
- D. Create hazardous or unsafe conditions;
- E. Unreasonably interfere with or harm other uses of the area (including submarine cables); or,
- F. Disturb archaeological resources.

Any person conducting geological or geophysical activities for mineral prospecting, noncommercial exploration, or scientific research under Section 11 of the OCS Lands Act and 30 CFR Part 580, as applicable, must immediately report to us if you;

- A. Detect hydrocarbon and/or mineral occurrences;
- B. Encounter environmental hazards which constitute an imminent threat to human activity; or,
- C. Are aware of activities which adversely affect the environment, aquatic life, archaeological resources, or other uses of the area in which you are conducting prospecting or scientific research activities.

Any person conducting shallow or deep stratigraphic test drilling activities under a permit for prospecting or scientific research notice under 30 CFR Part 580 must utilize the best available and safest technologies that BOEM determines to be economically feasible.

The authorization BOEM grants you under Section 11 of the OCS Lands Act and 30 CFR Part 580, as applicable, to conduct geological and geophysical prospecting or noncommercial exploration for minerals other than oil, gas, and sulphur or for scientific research does not confer a right to any discovered oil, gas, or other minerals, or to a lease under the OCS Lands Act.

Time Restriction for Permits, Authorizations, and Notices

Activities are approved for a specified period and typically do not exceed 1 year. Any extensions requested typically do not exceed1 year.

Geological and Geophysical Activities Requiring Permits, Authorizations, and Notices Geological and Geophysical Prospecting or Noncommercial Exploration for Mineral Resources

You may not conduct geological and geophysical prospecting or noncommercial exploration for minerals other than oil, gas, and sulphur in the OCS without an approved permit or authorization unless you conduct such activities under a lease issued or maintained according to the OCS Lands Act. You must obtain separate permits or authorizations for either geological or geophysical prospecting or noncommercial exploration for mineral resources. If BOEM disapproves your application, the statement of rejection will give the reasons for the denial and will advise the applicant of those changes needed for you to obtain approval.

Geological and Geophysical Scientific Research

You may not conduct geological and geophysical scientific research related to minerals other than oil, gas, and sulphur in the OCS without filing of a notice. You must obtain a permit for geological and geophysical scientific research which involves the use of solid or liquid explosives or the drilling of a deep stratigraphic test. If BOEM disapproves your application, the statement of rejection will give the reasons for the denial and will advise you of the changes needed for you to obtain approval.

You must file a notice with BOEM at least 30 days before you begin scientific research not requiring a permit or authorization. We may inform you of environmental laws and regulations pertaining to activities on the OCS. BOEM recommends that you submit your notice 90-120 days prior to beginning your work to ensure timely review of your notice by BOEM.

Information Required for Permits or Authorizations

You must complete the applicable sections of the Application (Attachment 1) and must include a public-information, page-size map(s) showing the location of the proposed area of activity (Section B.2 or C.1). In addition, you must submit the appropriate attachment to Section D of the Application. This includes a detailed map of the proposed activity for Section D.8 (Geological Application) or Section D.11 (Geophysical Application). Only applicants for a Notice of Scientific Research or Noncommercial Authorization must complete a Nonexclusive Use Agreement (Attachment 2).

The information you provide on the Application (excluding Section D) and on the Nonexclusive Use Agreement, including continuation sheets and the page-size map(s), is NON-PROPRIETARY INFORMATION. These non-proprietary portions of the application constitute the "public information" copy of Form BOEM-0134 and will be made available to the public with the executed permit or authorization.

The information listed in section D is PROPRIETARY INFORMATION, unless you plan to conduct noncommercial exploration. If PROPRIETARY, BOEM will not make this information available to the public without your consent for a period mandated by law or regulation. However, BOEM may determine that earlier release is necessary to properly develop the area permitted.

Modifications to Approved Permits or Authorizations

BOEM must approve any modification to the permitted or authorized operations.

Filing Locations for Application to Conduct Prospecting or Noncommercial Exploration for Mineral Resources and for Permits or Notices to Conduct Scientific Research

File one original, one copy of the original, one digital copy, and one public copy (all with original signatures) at the following locations at least 30 days before you begin operations. Contact BOEM for further instruction on digital signature applications. BOEM recommends that you submit your notice (or application) 90-120 days prior to beginning your work to ensure timely review of your notice by BOEM.

A. For the OCS off the State of Alaska:

Regional Supervisor for Resource Evaluation Bureau of Ocean Energy Management Alaska OCS Region 3801 Centerpoint Dr., Suite #500 Anchorage, Alaska 99503-5823

B. For the OCS off the Atlantic Coast, Puerto Rico, and U.S. Territories in the Caribbean Sea:

Chief, Marine Minerals Division Bureau of Ocean Energy Management Office of Strategic Resources 45600 Woodland Road Sterling, Virginia 20166-9216

C. For the OCS in the Gulf of Mexico:

Regional Supervisor for Resource Evaluation Bureau of Ocean Energy Management Gulf of Mexico OCS Region 1201 Elmwood Park Boulevard New Orleans, Louisiana 70123-2394

D. For the OCS off the States of California, Oregon, Washington, or Hawaii and other U.S. Territories in the Pacific Ocean:

Regional Supervisor for Office of Strategic Resources Bureau of Ocean Energy Management Pacific OCS Region 760 Paseo Camarillo, Suite #102 Camarillo, California 93010-6092

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF OCEAN ENERGY MANAGEMENT

Pacific OCS Region

(Insert Appropriate BOEM Office)

APPLICATION TO CONDUCT GEOLOGICAL OR GEOPHYSICAL PROSPECTING OR NONCOMMERCIAL EXPLORATION OR NOTICE OF SCIENTIFIC RESEARCH RELATED TO MINERALS OTHER THAN OIL, GAS, AND SULPHURON THE OUTER CONTINENTAL SHELF

(Section 11, Outer Continental Shelf Lands Act of August 7, 1953, as amended on September 18, 1978, by Public Law 95-372, 92 Statute 629, 43 U.S.C. 1340; and 30 CFR Parts 580 and 280, as applicable)

Craig Wallace
Name of Applicant
1671 Belle Isle Avenue,
Number and Street
Mount Pleasant, SC 29464
City, State, and Zip Code
Application is made for the following activity:
Geological prospecting or noncommercial exploration for mineral resources
Geological scientific research
Geophysical prospecting or noncommercial exploration for mineral resources
Geophysical scientific research
Submit: One original, one copy of the original, one digital copy, and one public copy (all with original signatures). Contact BOEM for further instruction on digital signature applications.
To be completed by BOEM
Permit or Authorization Number: N/A: Internal Date: 12/17/24
Tracking # T24-001

A. General Information

1.	The activity will be conducted by:	
	Deep Sea Vision	For Department of Commerce, American Samoa
	Applicant Name Craig Wallace	Purchaser(s)/User(s)/Sponsor of the Data Mike Mcdonald, Assistant Director
	Number and Street 1861 Belle Isla Avenue	Number and Street A.P. Lutali EOB, 2nd Floor
	City, State, and Zip Code Mount Pleasant, SC 29464	City, State, and Zip Code Pago Pago, AS 96799
	Telephone/FAX Numbers +447825229519	Telephone/FAX Numbers +1 6846335155
	E-Mail Address craig@deepseavision.com	E-Mail Address michael.mcdonald@doc.as.gov
2.	The purpose of the activity is: Prospecting Noncommercial Exploration Scientific Research	
3.	Describe your proposed survey activities (i.e., v describe the potential environmental effects of t life. Describe what steps are planned to minimi Potential Effect: Sound levels causing disturbar exclusion zone or 2) Potential Effect: Bottom ovibracoring rigs. (You may provide as a separal Information.)	ressel use, geophysical sources, geological operations, etc.) and the proposed activity, including potential adverse effects on marinize these adverse effects (mitigation measures). For example: 1) nce; Mitigation: Marine Mammal Observers, marine mammal disturbance; Mitigation: Assisted deployment/ retrieval of the attachment. Label as BOEM-0134 Section A General reclude any disturbance and all sonar amplitude frequinecies are consider safe for marine life.
4.	The expected commencement date is: 9th of	November 2024
	The expected completion date is: 17th of N	lovember 2024
5.	PART STATE OF THE	ield operation is: Craig Wallace
	May be contacted at: Craigievar Denhea	ad Mintlaw Aberdeenshire UK AB424HR
	Telephone (Local) +44782522951	
	Email Address: craig@deepseavision.	com Radio call sign

FORM BOEM-0134 (December 2021)
Previous Editions are Obsolete.

6.	The vessel(s) to be used in th	e operation is (are):			
	Name (s) MV SeaSurveyor	Registry Number	(s)	Registered owner(s)	
	- Seasurveyor	IMO 8824543		SEAWORKS	
		MMSI 5123850	000		
		Registered Wel	lington NZ		
7.	The port from which the vess	sel(s) will operate is:	Pago Pago,	American Samoa	
8.	Briefly describe the navigation	on system (vessel nav	igation only):		
	Complete for Geologic			ercial Exploration for Minera	l
	The type of operation is:	Scientific Resear	CII		
170.5		ep stratigraphic test, o	r		
		allow stratigraphic tes	t with proposed	total depth of	, or
	(c) Vib	oracoring			
	(d) Oth	Non contact AU\	/ survey. Sona	ar mapping and Camera	
2.	enclosing the sampling or te	st sites may be used, Act boundary, 3) dis	2) OCS protrac	ch sample or test. Where appropriate tion areas and lease blocks; coastline tion from a point of reference to area	; point of
C.	Complete for Geophys Resources or Geophys			mercial Exploration for Mine	ral
1.	For the proposed operation:				
	(a) Acquisition met	hod (Towed instrume	nt, OBN, OBC	Streamer): Autonomous Underwate	er Vehicle
				or sub-bottom profiler, side scan sons other controlled-source electromagne	
	Synthetic Aperture Se	onar, Multibeam Ed	chosounder,	Sub Bottom Profile, Camera and	Laser
2.		locks; coastline; point	t of reference;	e activity with a representative polygoubmerged Lands Act boundary, 3) dl as "Public Information."	
3.	List all energy source types t fathometer, air gun or air gur			or sub-bottom profiler, side scan so: Aperture Sonar, Multibeam Echosounder, Sub Bottom Profile, C	

Explosive charges will will maximum charge size (in pounds) to		If applicable, indicate the typ	e of explosive and
Type P	ounds	Equivalent Pounds of TNT	
D. Proprietary and Additional Ir	formation Attacl	hments	
Use the appropriate form on page 9 for a "geophysical" permit or authorization geological or geophysical prospecting period conducted concurrently.	application. You mu	st submit a separate form BO	EM-0134 to apply for each
E. Certification			
I hereby certify that foregoing and attack PRINT NAME Craig Wallace		ue and correct.	
SIGNED	-	DATE 6th Nove	mber 2-24
President of Oper	ations		
APPLICANT Deep Sea Vi	sion		
			_
	O BE COMPLET	ED BY BOEM	
NA: Inter Permit / Authorization No. <u>Tracking</u> T24_001	nal # Assigned l	Obediah Racic	ot
This application is hereby:			
(a) Accepted (b) Returned for rea	sons in the attached		
NECITAS SIGNED SUMAIT Date: 2024.12.18 13:54: -08'00'		gional Supervisor	_{DATE} 12/18/24

Section D Proprietary and Additional Information Attachment Required for an Application for Geological Prospecting Permit or Noncommercial Exploration Authorization

1. and de	Description of proposed coring, drilling, or sampling method. Include penetration, heat flow measurements, epth of penetration:		
	Not applicable, non contact survey using sonar and camera.		
2.	Description of coring, drilling, or sampling equipment to be used:		
3. of san	List proposed coring, drilling, or sample location(s) with latitude and longitude coordinates and total number nples to be acquired. These locations may be sent digitally on a DVD (attach separate page if necessary):		
4.	Navigation system or method to be used to position sample locations:		
5.	Method of sample, storage, and handling: NA, Sonar and Light only no physical samples		
6. NA	List each test to be conducted on the samples with a brief description of its objective:		
7. NA	Estimated date on which samples, logs, and analyzed and/or processed data will be ready for inspection:		
specifichart:	Attach map(s), plat(s), and chart(s) (preferably at a scale of 1:250,000) and/or an electronic version of same ing latitude and longitude, scale, OCS protraction areas, OCS blocks, Submerged Lands Act boundary, and fic sample location(s) in latitude(s) and longitude(s) for each of the proposed sample site(s). The map, plat, or should be submitted at a sufficient size and scale to make out all details of the activities shown. Label the opy map "Proprietary," if the data are for commercial purposes and are considered proprietary. Along with the opy map, submit the ArcGIS shapefiles (and metadata) on DVD needed to reproduce the map of the proposed le site(s), including individual site names in the attribute table.		

Section D Proprietary and Additional Information Attachment Required for an Application for Geophysical Prospecting Permit or Noncommercial Exploration Authorization

Label separate attachments as BOEM-0134 Section D Proprietary and Additional Information Attachment.

1. Detailed narrative, modeling of sound propagation, and visual description of the geophysical energy source(s) and receiver(s)/streamer(s) (receiving array):

Sound sources on the AUV are not high energy geophysical sources.

- 2. Attach a map view diagram that illustrates vessel(s) source and receiver(s) configuration. Label each vessel indicating its function and include the dimensions of tow fish, hull or davit-mounted instruments, streamer(s), etc. Indicate the number of chase and alternate vessels to be used, if applicable.
- List each energy source to be used (e.g., chirp profiler, sub bottom profiler, side scan sonar, fathometer, air gun or air gun array(s), towed dipole, etc.). Indicate the source's manufacturer, model, Source Level (SL) in dB re 1μ Pa @1m in water (RMS) and if applicable, Source Level (SL) in dB re 1μ Pa @1m in water (Peak to Peak). If the manufacturer does not provide a peak-to-peak level (many side scan sonars, etc.), please enter N/A. Additionally, provide the operational frequency ranges and any operational power settings.

Energy Source	Manufacturer	Model	Array or Airgun Size (cu. in.)	Source Level (SL) in dB re 1µPa @1m in water (RMS)	Source Level (SL) in dB re 1µPa @1m in water (Peak to Peak)	Frequency (Hz-kHz range)	Power Modulation	Pulse Length
Synthetic	Kongsberg	1032	NA	NA	~200	85-115 KHz	FM	8ms
SBP	Edgetech	2205	NA	NA	~194	2-6kHz	FM	20ms

For any geophysical source operating below 180kHz, provide the transmission loss distance from the sound source to the following SPL in RMS dB levels:

dB level	Distance from Source	
190 dB	4 metres	
180 dB	10 metres	
160 dB	36 metres	

4.	Shot (energy pulse) frequency per linear mile (statute):
5.	Towing depth (ft/m) of the energy source: NA, typical 30m altitude in 5000m depth
6.	Towing depth (ft/m) of the receiver(s): Typical 5000m

- 7. For controlled-source electromagnetic (CSEM), ocean bottom node (OBN), magnetotelluric, and ocean bottom cable (OBC) surveys, describe the node deployment and retrieval procedures. Indicate the location (latitude and longitude coordinates), number, and spacing of any ocean bottom receivers, cables, and anchors. If anchors will not be retrieved, provide the physical composition and rate of decomposition. Location data may be submitted digitally on a DVD (attach separate page if necessary).
- 8. Navigation/positioning system, and if relevant, method used to position shotpoint locations and or ocean bottom receivers:

Subsea Inertial Navigation System with USBL Aiding

- Proposed areal extent (blocks) for survey, and total number of line miles proposed for survey:
 As per map Area 1 and 2, Estimated 200 line miles per survey
- Estimated date (month and year) on which final data will be available for all proposed data sets:
 January 2025
- 11. Attach map(s), plat(s), and chart(s) (preferably at a scale of 1:250,000) and/or an electronic version of same showing latitude and longitude, scale, OCS protraction areas, OCS blocks, and Submerged Lands Act boundary. The map, plat, or chart should be submitted at a sufficient size and scale to make out all details of the activities shown. The map should be labeled "Proprietary" if the data are for commercial purposes and are considered proprietary. For 2D data acquisition, provide specific track lines with line identifications with the total number of line miles proposed, or a representative polygon and total number of blocks for 3D surveys. Along with the hardcopy map, submit the ArcGIS shapefiles (and metadata) on DVD needed to reproduce the map for 2D track lines and include individual line names in the attribute table. For 3D surveys, submit the ArcGIS shapefile (and metadata) for the representative polygon.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF OCEAN ENERGY MANAGEMENT

Pacific OCS Region

(Insert Appropriate BOEM Office)

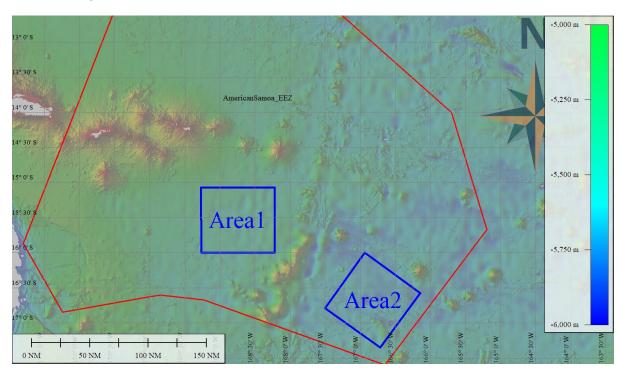
NONEXCLUSIVE USE AGREEMENT FOR SCIENTIFIC RESEARCH OR NONCOMMERCIAL EXPLORATION ON THE OUTER CONTINENTAL SHELF

D	available to the public for inspection and reproduction, such time being the earliest practicable time. Data will be made available in raw format through use of drives delivered to			
th	e care of Micheal Mcdonald	, Division of Commerce, American Samoa.		
m	nichael.mcdonald@	doc.as.gov		
В.	Deep Sea Vision proposed activity will not be sold or v	(applicant) agrees that the data and information resulting from the withheld for exclusive use.		
		(Signature of Applicant) Craig Wallace		
		Craig Wallace (Print Name of Applicant)		
		Craig Wallace		
		Craig Wallace (Print Name of Applicant)		
		Craig Wallace (Print Name of Applicant) President of Operations		

Submit: One original, one copy of the original, one digital copy, and one public copy (all with original signatures). Contact BOEM for further instruction on digital signature applications.

Outlined Areas for Exploration work with Deep Sea Vision AUV

The map below shows the location of two proposed sites for exploration with the HUGIN 6000 AUV system, Area 1 and 2.



Area 1 Main Coordinates

- -169.3W, -15.07S
- -169.3W, -16.0S
- -168.2W, -16.0S
- -168.2W, -15.07S

Area 2 Main Coordinates

- -166.9W,-16.07S
- -166.14W,-16.56S
- -166.71W,-17.34S
- -167.41W,-16.79S